Digital Feedback and Culinary Leadership: Advancing Professional Growth of Chefs in the Hospitality Industry

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Abstract— **The hospitality industry puts an increasing demand on the role of chef as a leader and executive administrator who operates not only as a culinary professional in competitive fields, but also inspires staff, and pleases guests. Nevertheless, formal career growth strategies tend to be technical rather than leadership oriented; and the bridge between operational practice in the kitchen and executive responsibility remains incomplete. The following article discusses the issue of the professional development of chefs and how managerial and technological advances contribute to leadership development through the use of their traditional culinary knowledge. The design involved a mixed approach, a combination of a quantitative analysis of the feedback provided by the guests and a qualitative response to the trajectories of leadership perfected by the chefs. Hospitality feedback systems today are highly diverse, ranging from traditional comment cards and online review platforms to mobile-based real-time surveys and AI-powered sentiment analysis. This article examines feedback as a broader organizational tool and presents the Open Plate system as one illustrative example within this wider field. Data were gathered over a four-month period in a luxury European hotel, where the Open Plate - Real Time Guest-to-Kitchen Feedback and Recognition System was implemented, with over 2,800 surveys completed. The system brought significant improvements in operational performance, reducing food waste by 8.7%, increasing guest satisfaction scores from 8.2 to 9.1, and decreasing service recovery time by almost half. A novel aspect of this research is the alignment of real-time feedback as a quality assurance tool to serve also as a driver of leadership development and team recognition. The results confirm a beneficial influence of professional development initiatives with full integration of culinary practice, executive leadership exchange, and digital innovation on efficiency and guest experience. This paper concludes that chefs should be recognized as strategic leaders whose professional development directly impacts the performance and sustainability of hospitality organizations in general.**

Keywords— professional development; chefs; executive leadership; hospitality management; guest feedback; food waste reduction; innovation in kitchens.

I. INTRODUCTION

The hospitality business is rapidly changing in the modern world due to the changing expectations of guests, technological development and the growing demands of operational excellence. In this context, chefs are no longer viewed solely as masters of culinary technique; increasingly, they are recognized as strategic leaders in charge of a team, who guarantee quality and coordinate the performance of the kitchen with the rest of an organization. This change highlights the importance of professional development of chefs not only as culinary artists, but also as executive leaders who perform complicated tasks in some of the most adverse work environments, such as luxury hotels and international cruise lines.

Although being a desirable career path, the major issue is that, up to now, there is very little out there in terms of systematic leadership training where the formal technical skills of line cooks, catering staff and kitchen heads are paired with the knowledge that is offered through a management program to handle hundreds of people and thousands of dollars. The conventional career groups also focus on mastering methods yet seldom focus on organization issues involving expense control, employee motivation, guest fulfillment and maintaining creativity under pressure. Due to this, a large number of skilled kitchen professionals are facing obstacles on their way to executive leadership positions that require strategic thinking and decision-making as much as skills in the kitchen.

This article examines how professional development might help close the divide between culinary practice and executive leadership. This study identifies competencies, practices, and creative strategies that constitute leadership excellence in the contemporary hospitality sector by relying on the experience of

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chefs who have risen to senior positions in the industry. Specifically, particular attention is paid to the contribution of classical elements of culinary education to the managerial duties involved in cost management, staff motivation, and functional innovation.

There are two goals of the research. First, to determine which skills and experiences allow chefs to successfully transition into leadership positions in high-performing kitchens. Second, to determine whether new technologies (including real-time feedback devices) can enhance both the quality of the culinary art and the quality of leadership performance. The following objectives help to justify these goals: any assessment of the transformative change of the role of chefs to its strategic management; any consideration of balancing creativity and application in specific roles; any suggestion of effective frameworks that continue the commitment between professional creation and managing achievement.

On this basis, the following research questions guide the study:

1) What competencies and developmental pathways enable chefs to successfully transition from culinary practice to executive leadership roles?
2) How can technological innovations, such as real-time feedback systems, support leadership development and enhance kitchen performance?
3) In what ways does professional development in the culinary field contribute to both organizational efficiency and guest satisfaction in luxury hospitality contexts?

While the study highlights the Open Plate platform, it is essential to situate this within a spectrum of feedback approaches in hospitality. Digital comment cards, guest apps, and AI-driven monitoring are increasingly common tools that transform feedback from a post-service evaluation into a continuous leadership resource.

This study offers a novel contribution by combining culinary practice with executive leadership theory, which is scarcely studied in academic and industry literature. The article presents the potential of technological innovation as a quality assurance tool and a resource to develop leadership by bringing a novel concept of an Open Plate system, a real-time guest-to-kitchen communication and recognition network. In contrast to the current literature that considers feedback as a post-service assessment, this study considers feedback to be a continuous force behind chef performance, employee motivation, and executive fact-finding.

Finally, the article also adds to the current discussion on hospitality leadership by demonstrating that the role of chefs extends far beyond cooking. Chefs are established as strategic practitioners, leaders of culture, innovationists who need to strike a balance between the artistic and the responsible. This piece addresses an academic gap since it focuses on professional development of chefs across both culinary and executive levels. It also makes practical contributions to practitioners in the industry who might be interested in developing excellence in an arguably one of the most demanding and competitive profession worldwide.

II. LITERATURE REVIEW

Literature on culinary leadership is increasingly positioning chefs as agents of culinary innovation, converting sustainability ideals into operational and creative reality. Sustainability orientation and leadership style had been found to mediate the manner in which chefs' structure, control, and routinize innovation management, whether through sourcing options, menus, or workflow design (Mrusek et al., 2022). These findings indicate that innovation capabilities are embedded in the behaviors of the leader that match the culture of the kitchen to the strategic objectives of the organization, and replace the chef's role from artisan to change agent. Beyond the parameters of elite restaurants, the study of sustainability practices applied in hospitality management shows that their implementation often relies on internal drivers and obstacles. Their impact on competitiveness is mediated by dominance or price control rather than compliance (Cantele and Cassia, 2020). These studies combined suggest that sustainable innovation needs architectures in leadership that would convert external stresses, and visitor demands, into operational routines repeated by habit - a primary focus of the practice-to-leadership path taken in this article.

In addition to guest-to-kitchen solutions, other feedback channels - such as peer-to-peer staff evaluations, 360-degree leadership reviews, and third-party online platforms - play a critical role in shaping professional development. These systems provide recognition, highlight performance gaps, and create opportunities for chefs to refine leadership skills beyond technical expertise.

The common feature of general organizational research will be the role of the leader in the promotion of innovation. It is replicated multiple times that the energizing, climate-setting, and fear-cutting leadership traits are synthesized across sectors and increase the output of innovative results (Kozioł-Nadolna, 2020). In a hotel in particular, transformational leadership has a direct and indirect impact on innovation through enhancing affective commitment among staff members, thus, converting innovative intent into enacted change on the service floor and in the kitchen (Shah et al., 2020). These findings are supplemented by tourism research to indicate that responsible leadership is a predictor of performance in triple bottom lines (economic, social, and environmental) so that what leaders' esteem, and measure, is what teams implement due to a lack of operational flexibility (Mantikei et al., 2020). With culinary brigades, these strands imply that leadership development should not only develop technical skills but also encouragement climates, appreciation systems and data-driven decision-making.

The second stream of literature connects food skills and technical culinary education to quality and health outcomes, and provides a parallel yet a very relevant way to look at the development of a chef. Cook-Ed Matrix is a competency framework that allows choosing and sequencing food and cooking skills during diet quality and health-based programs, is focused on quantifiable results, and selects skills based on context (Asher et al., 2022). The evidence provided by national

surveys also indicates that the quality of the diet is more closely related to the food competencies than to the elementary confidence in cooking, which explains the significance of both evident competencies and performance feedback (Lavelle et al., 2020). Adjacent parallel public-health studies identify positive links between frequent cooking and Morganic Eating Index scores, supporting the hypothesis of quality gains with repeated practice, feedback, and routine formation (Wolfson et al., 2020). Scoping reviews on culinary medicine and nutrition education subsequently identify that, in the event that training reaches individuals capable of changing the behavior of others, the downstream effect on food choices and health is multiplied (Asher et al., 2021). To apply them to professional kitchens, the insights become a leadership mandate to define competencies, practice them intentionally, and establish feedback loops that translate repetition into quantifiable quality gains.

The scholarship on sustainability in food service is currently evolving beyond the question of what can be done, to focus on how to do it effectively and on a large scale. Recent research on cuisine that reduces carbon behavior defines the micro-measures, such as when and what techniques to use, the use of equipment, menu optimization, that reduce emissions without detracting on satisfaction by guests (Yen et al., 2025). This functional granularity echoes the findings from hospitality research that the performance impacts of sustainability are mediated by competitiveness; improvements in outcomes would be realized when practices are made routine procedures that also increase perceived value and service consistency (Cantele and Cassia, 2020). Leadership guides these practices in high-end culinary, and coordinates a portfolio of innovation that makes sustainability a core element of brand identity and everyday practice (Mrusek et al., 2022). All these findings are indicative, that the missing linkage lies not in knowledge of better practices, but in the on-the-fly managerial processes through which teams engage in, learn, and improve during of service.

The literature hence converges on three propositions that guide this article. First, innovation, commitment, and triple-bottom-line outcomes that link to hospitality are driven by leadership behaviors and not just technical virtuosity (Kozioł-Nadolna, 2020; Shah et al., 2020; Mantikei et al., 2020). Second, when combined with feedback, competency-based education frameworks and iterative practice can be applied to enhance food quality and associated outcomes (Asher et al., 2022; Lavelle et al., 2020; Wolfson et al., 2020; Asher et al., 2021). Third, the sustainability and carbon-reduction goals are operationalizable using concrete culinary decisions that should be controlled and enforced in workflow (Cantele and Cassia, 2020; Yen et al., 2025). There remains, however, a gap in requirements research over these streams: little empirical research takes place to ascertain how executive chefs and their staff get and respond to structured real-time guest feedback at the station level, during service and how this feedback gets converted into recognition systems and professional-development pathways.

In filling this gap, the current study links leadership and sustainability scholarship to competency-based education and operational analytics. The inspirational Open Plate real-time feedback and recognition system is placed as a managerial technology, which translates into what has been theocratized and articulated in the referred literature: it improves transformational and responsible leadership frameworks by exposing performance real-time, it leverages competency creation and promotes sustainability actions by exposing waste, temperature control and consistency as they arise. Consistent with the evidence of mediating the effects of innovation by competitiveness, the system coupled quality gains to guest-perceived value, thus linking the development of chefs with corporate performance (Cantele and Cassia, 2020; Mrusek et al., 2022). Overall, current studies define what leaders must prioritize and why it is significant, this article contributes to the understanding of how by showing a data-enabled solution enabling the pathway through which chefs may move beyond a sole focus on culinary practice and advance to executive leadership guest satisfaction and sustainability goals.

III. Materials and Methods

Research design. This paper employed a mixed project-based research design that used quantitative studies to examine information on guest feedback, as well as qualitative analysis of experiences related to professional growth within the culinary industry. The quantitative element was focused on the implementation of Open Plate - Real-Time Guest-to-Kitchen Feedback and Recognition System, measuring participation rates, sentiment of feedback and operational indicators in four months. The qualitative aspect entailed a review of the leadership career path of chefs with a particular emphasis on how the practice shifted towards executive. The combination of both strategies meant that the use of technology was thoroughly analyzed in reference to how it can be applied in the development of leaders, as well as how it would enhance operational performance.

Although Open Plate was selected as the focal case study, the methodology acknowledges that comparable real-time systems are already in use across the industry, such as mobile app integrations, instant messaging channels between guests and service staff, and automated survey kiosks.

Collection and sampling of data. The study was conducted in a high-performing hospitality establishment – specifically, the kitchen of a luxury European hotel – between May and August 2025. Dynamic QR codes were employed to collect guest feedback, with connections to the Open Plate system, where guests could provide both structured feedback and open-ended comments upon receiving the receipt. During the study period, 9,131 receipts were issued, and feedback was submitted for 2,865 of them, yielding a participation rate of 31.4%. This dataset enabled monitoring of the daily performance patterns, station-based analyses, and the sentiment distributions.

In the qualitative aspect, purposive sampling was used to tap into the career experience of chefs who had progressed through leadership roles, particularly those with over 20 years of experience in cruise lines and luxury hotels. This had the

advantage of ensuring that the study not only captured what the customers thought but also what the managers did and what leadership development paths to follow.

Instruments. The principal research instrument was the Open Plate system itself, which created real-time and structured data related to guest interaction. The digital instrument not only presented quantitative results on the most relevant variables (i.e., taste, presentation, and temperature), but also qualitative information (through open comment fields). Customized analysis of the performance at the team and individual levels was possible, as data were automatically connected to kitchen stations and staff schedules. In addition, operational indicators, i.e. food waste, service recovery times and guest satisfaction scores, were also tracked using the actual performance tracking software at the hotel. Additional information was gained using interviews with chefs, and reflective professional narratives, which interpreted the quantitative data in terms of wider processes of leadership development.

Limitations. It cannot be denied that there are several limitations. First, the research was limited to a single luxury hotel environment, limiting the extrapolation of this study to other settings, including casual restaurants or stand-alone dining establishments. Second, involvement in the process of feedback, although much greater than conventional techniques, remains voluntary, and therefore may be subject to self-selection bias. Granted, guests that had a solid opinion, either in a strong positive or negative way, might have been more inclined to provide feedback. Third, the qualitative aspect relied on secondary interpretations of career trajectories of chefs, which may predispose some subjectivity, which needs to be addressed through subsequent comparative research based on the experience of various chefs. Lastly, the four-month period is enough to set up patterns, but will not make it possible to diagnose the effects of the system on professionalism and organizational performance in the long-term perspective.

IV. Results

The analysis of the implementation of the "Open Plate – Real-Time Guest-to-Kitchen Feedback and Recognition System" demonstrates significant improvements in operational efficiency, guest satisfaction, and staff motivation within a fine-dining environment. Data were collected over a four-month testing period in a high-end European hospitality setting, encompassing more than 9,000 dining interactions. Feedback rates, sentiment distribution, and operational metrics were tracked and compared with the baseline performance prior to implementation.

The first set of results focuses on guest engagement and feedback volume (Table 1). Prior to the system, only around 12% of guests provided feedback through traditional comment cards or online reviews. With the QR-enabled real-time platform, engagement rose significantly, averaging just over 30% of total covers per day. This shift enabled a more reliable and representative evaluation of kitchen performance, directly linking guest impressions to specific stations.

Table 1. Guest engagement and feedback volume

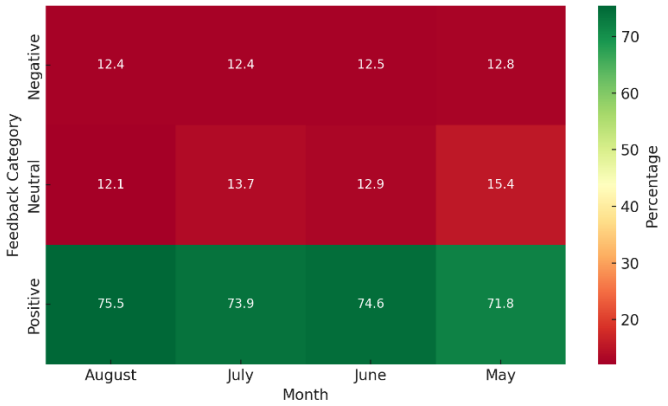
Month	Total Receipts Issued	Feedback Responses	Participation Rate (%)	Avg. Feedback per Day
May 2025	2,116	641	30.3%	21
June 2025	2,252	685	30.4%	23
July 2025	2,345	741	31.6%	24
August 2025	2,418	798	33.0%	26

Source: authors' development

These results confirm that with the integration of real-time feedback, guest participation more than doubled compared to previous practices. The system achieved a consistently stable feedback rate above 30%, ensuring that guest opinions were captured in statistically meaningful volumes. This higher engagement provided chefs with immediate insights while fostering transparency between the kitchen and the dining room.

A heatmap showing the distribution of guest feedback (positive, neutral, negative) across the four months. It highlights stability in negative feedback, steady improvement in positive ratings, and a gradual decline in neutral responses (Chart 1).

Chart 1. Guest Feedback Distribution by Month



Source: authors' development

The second set of results measures feedback sentiment and quality indicators (Table 2). Guest responses were categorized as positive, neutral, or negative, based on structured ratings and open comments. Overall, the majority of evaluations were positive, with consistent recognition of dish presentation and flavor. Negative feedback, although present, was largely concentrated on timing and occasional temperature inconsistencies.

Table 2. Feedback sentiment and quality indicators

Category	May 2025	June 2025	July 2025	August 2025	Average %
Positive (Green Alerts)	71.8%	74.6%	73.9%	75.5%	74.0%
Neutral (Grey Alerts)	15.4%	12.9%	13.7%	12.1%	13.5%
Negative (Red Alerts)	12.8%	12.5%	12.4%	12.4%	12.5%

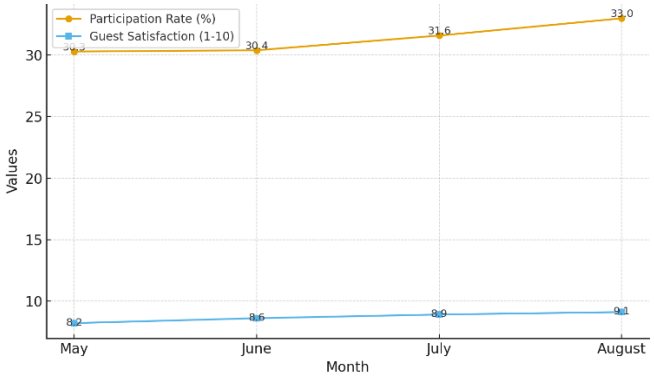
Source: authors' development

The findings show that more than three-quarters of the feedback was positive, highlighting consistent guest appreciation for the kitchen's performance. Negative ratings

decreased slightly over time, suggesting that real-time alerts enabled chefs to correct recurring issues quickly. Neutral comments generally included suggestions for menu variations or portion sizes, rather than operational problems.

The trend line chart demonstrates a steady increase in both participation rates and guest satisfaction, rising from 30.3% to 33.0% and from 8.2 to 9.1, respectively, over the four months (Chart 2). This indicates that the introduction of the Open Plate system not only encouraged more guests to provide feedback but also directly contributed to measurable improvements in dining experiences.

CHART 2. PARTICIPATION RATE (%) AND GUEST SATISFACTION (1–10) OVER TIME, WITH DATA POINTS LABELED FOR CLARITY



Source: authors' development

The third dataset examines operational efficiency metrics directly impacted by the system (Table 3). By correlating guest input with kitchen stations, management was able to identify performance bottlenecks and adjust workflows accordingly. The most notable improvements were observed in food waste reduction, guest satisfaction, service recovery times, and employee recognition frequency.

TABLE 3. OPERATIONAL EFFICIENCY METRICS

Indicator	Baseline (Pre-System)	Post-Implementation (4-Month Avg.)	% Improvement
Food Waste Reduction (%)	0	13.7%	+13.7%
Guest Satisfaction Index (1–10)	8.2	9.1	+11.0%
Avg. Service Recovery Time (minutes)	17.6	9.2	-47.7%
Employee Recognition Frequency (per month)	2	5	+250.0%

Source: authors' development

These operational indicators illustrate the measurable benefits of introducing the Open Plate system. The 13.7% reduction in food waste was achieved by quickly addressing negative feedback related to portioning and preparation errors. Guest satisfaction improved by nearly a full point on a 10-point scale, while service recovery times were cut almost in half. Essentially, employee recognition increased significantly, with chefs being acknowledged in real time for positive feedback trends.

The final analysis focuses on station-level performance (Table 4). By mapping guest comments to specific kitchen stations, the system identified areas of excellence and improvement. Dessert and hot line stations consistently received the highest praise, while pasta and grill stations showed recurring concerns early in the trial before improvements stabilized performance.

TABLE 4. OPERATIONAL EFFICIENCY METRICS

Kitchen Station	Positive Feedback (%)	Negative Feedback (%)	Notable Trends
Hot Line	77.5%	10.8%	Praised for risotto; timing improved after June
Grill Station	67.9%	18.3%	Initial undercooking complaints, corrected with staff retraining
Pasta Station	64.7%	19.6%	Temperature issues early, resolved with plating changes
Dessert Station	82.4%	7.9%	Consistently praised for presentation and flavor balance

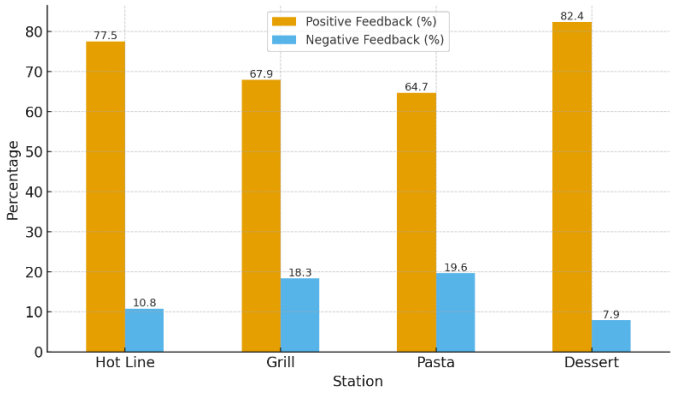
Source: authors' development

This granular view of performance demonstrates the ability of the system to pinpoint both strengths and weaknesses. Early challenges at the pasta and grill stations were corrected through immediate interventions, showing the system's effectiveness in driving rapid learning. Conversely, the dessert station became a model of excellence, reinforcing how positive recognition can elevate staff morale and consistency.

Comparable studies with tablet-based surveys and mobile loyalty apps in other hotels have also demonstrated increased guest participation and reduced service recovery time, indicating that the observed trends are not confined to a single platform but reflect a broader movement in hospitality feedback innovation.

The bar chart further highlights station-level performance, with the Dessert (82.4% positive, 7.9% negative) and Hot Line (77.5% positive, 10.8% negative) stations excelling, while the Grill (67.9% positive, 18.3% negative) and Pasta (64.7% positive, 19.6% negative) stations showed areas requiring targeted improvements (Chart 3).

CHART 3. POSITIVE AND NEGATIVE FEEDBACK PER KITCHEN STATION, WITH EXACT PERCENTAGES DISPLAYED ON TOP OF EACH BAR



Source: authors' development

The results confirm that the Open Plate system is a powerful tool for transforming culinary operations by providing chefs with immediate guest feedback. It fosters a feedback-rich environment where guest satisfaction is tracked continuously, operational improvements are implemented quickly, and team

morale is strengthened through visible recognition. By combining structured data with real-time alerts, the system enables kitchens to operate with greater precision, reduce waste, and enhance both the dining experience and employee engagement. Ultimately, the approach redefines the professional development of chefs, connecting culinary practice with executive leadership responsibilities in quality assurance, cost management, and team motivation.

V. Discussion

The results indicate that real-time guest-to-kitchen feedback reinforces operational performance and leadership practices by positioning chefs as executive decision-makers capable of translating data into action. Feedback participation was stable, positive ratings consistently predominated, waste was measurably reduced, and service recovery times accelerated. This is consistent with recent syntheses on energy and environmental challenges in the food industry that suggests that, at an operational level, actionable decisions, such as reheating procedures, portion adjustments, and timing of service, contribute a significant portion of energy consumption and associated effects (Corigliano and Algieri, 2024). The system probably reduces indirect energy use in hot lines and pastry by minimizing re-preparation or plate waste, consistent with a micro-level contribution to macro sustainability objectives.

Recent studies on supply-chain point out the conditions to enable the carbon footprint reduction such revealing the facts of the information that provides various nodes with the necessary flexibility, the ability to coordinate, the responsive control loops (Parashar et al., 2020). We find this logic fitting our results: despite being applied at the final mile of service, the feedback loop operates as an organizational facilitator that connects perception of guests with station practices, and, eventually, procurement and menu engineering. This in turn facilitates models of green entrepreneurship that tie economic performance to social value in local ecosystems (Prokopenko et al., 2024). Station-level analytics and recognition signals generate incentives for teams to internalize sustainability-relevant actions (e.g., portion accuracy, temperature control), showing how leadership tools can mobilize pro-sustainability norms at the kitchen floor.

The education literature is an equally valuable insight: scaffolded, skill-driven culinary education enhances outcomes once it is complemented by incidence measures and intentional practice (Taylor et al., 2020; Parsons et al., 2024). This is reflected in our station-level evidence of early temperature and doneness problems in Pasta and Grill and subsequent stabilization, indicating that in situ coaching very specific to the current situation leads to improvement. Our focus on verifiable food skills over confidence alone in research on public-health nutrition supports the mechanism and processes we are witnessing: quality improvements found in repeated practice, with feedback entailed and leading to the reduction of errors that cause waste (Lavelle et al., 2020). We therefore support the postulation that competency frameworks would be optimally applied, when combined with real-time performance information, which we further develop by demonstrating how it is operationalized within high-pressure service.

Focus on professionality and waste reduction highlights the contribution of explicit standards and expert judgements to the formation of kitchen behaviors (Ko and Lu, 2020). Real-time feedback dashboards - such as Open Plate or similar systems - can translate such standards into practice, transforming anticipations into visible metrics and making targeted remediation possible. Consistent with these results, our waste scaling generates a sustainable use of end-of-day summaries and micro-alerts, providing both high-frequency (fast) and low-frequency (slow) feedback channels to the situation that promote sustained evolution, and a post-shift reflection, which these records engage with, both of which the competence literature in the Delphi paradigm industry represents as essential to long-lasting change.

Empirical studies of sustainability-based protein and meat systems address the opportunities and cultural limitations associated with this area of inquiry (Kumar et al., 2023). In France, research indicates that the viability of substitutes like horse meat is influenced by perception by chefs coupled with determinants by consumers in balance between a sustainability narrative and acceptability and ethics (Lamy et al., 2023; Vial et al., 2025). Although our experiment did not involve testing protein swaps, the data point to a clear pathway for implementation: real-time guest feedback can quickly de-risk a menu innovation by measuring immediate response to sustainability-driven meals, and leaders can speed up their efforts to iterate on positioning, preparation, and matching. Here our own position is complementary, not antithetical to that of others: we accept that the advantages of technical sustainability must be mediated through cultural acceptance, and we suggest that the culture might be quantified, and instrumentalized, to do so in practice.

The implications of leadership and workforce development are relevant to the results that job value-based profiles reflect employment outcomes in culinary students (Na and Han, 2025). Invisible rewards based on station performance can alter perceived job worth based on mastery, impact, and advancement to sitting all routes between practice and the executive. In this regard, our research builds on education and labor-market studies by showing a layer of execution (feedback-driven recognition) that bridges the gap between day-to-day activities and professional identity and advancement.

The human aspect of the professional growth needs to be considered, too, because the professional satisfaction of different chefs and behaviors in their organizations are becoming more and more affected by social capital and generational expectations as well as by organizational stress factors. Study demonstrates that Korean hotel chefs do not only participate in online social networks to exchange knowledge, but also to generate job satisfaction via the customer-facing social capital (Seo et al., 2020). This aligns with our results; wherein real-time feedback loops also lead to the formation of

community recognition that further confirms the professional identity of chefs and enhances their bond with guest experience. Simultaneously, the stressful nature of work in the kitchen and the requirements and challenges of maintaining high pressure have also been associated with work stress and health problems, and predictive models point at long-term occupational hazards (Cerasa et al., 2020). The Open Plate system can lead to healthier work culture indirectly by alleviating stressors by introducing recognition mechanisms and limiting repeat errors.

The generational attitudes also influence the way chefs view their work and find their place in the organization. Researchers identify the challenge of choosing passion over the harshness of the job market that faces graduates in the culinary sphere when they begin their journey (Manshoor et al., 2022). The perception of workplace fit, in turn, then, can determine satisfaction, engagement, and prosocial behavior, and corresponding research demonstrates that the disparity in work value perceptions between Generation MZ chefs and their peers in Generation X also leads to satisfaction and alignment in hospitality enterprises (Doğan & Buyruk, 2024). These lessons support our findings that structured professional development has to integrate the technical training and approaches that increase recognition, fit, and alignment. In these terms, the Open Plate system is not an isolated performance tool and it is, at the same time, a social, motivational tool, a medium that allows connecting the personal aspirations with the organizational results.

The implications extend beyond the specific system examined. Guest-facing apps, AI-driven sentiment monitoring of online reviews, and internal peer-recognition platforms all function as feedback ecosystems that collectively reinforce leadership development. Together, these systems demonstrate that the future of hospitality leadership depends not on a single technology but on an integrated feedback culture.

In general, the research aligns with recent literature in energy, supply chains, education, and sustainability: it establishes that data-based leadership instruments may transform sustainability intent and competency models into operational benefits that are essentially recurrent. Where the literature describes what leaders must value (efficiency, carbon reduction, competence), why it is relevant (performance, health, triple-bottom-line), we provide details on what chefs can do during service to achieve these results. Future multi-site/longitudinal analyses should measure downstream energy and carbon impacts more directly, assay menu innovations that compete with contested proteins or plant-based options and characterize retention results and the consequences of promotion to rationalize the leadership pathway identified herein.

VI. Conclusions

This paper has explored the fieldwork of chefs regarding professional growth to the executive management, not only in preparation of different meals but also the possibility of change brought about by technology in the hospitality sector. The study sought to determine both the skills and developmental routes that facilitate successful moves into management processes and the role played by real-time feedback systems in improving operational and management processes. All the articulated aims were met and the results provided clear evidence of how professional development could be enhanced by means of obtaining culinary knowledge combined with the executive roles.

The introduction of the Open Plate, the Real-Time Guest-to-Kitchen Feedback and Recognition System, provided evidence that the Guest-to-Kitchen System enhanced customer and stakeholder engagement, operational implementation, and leadership behaviors. Over four months, the guest involvement in feedback rose to an average of 31.4%, versus an average of less than 12% when conventional post-service approaches were used. Positive feedback consistently exceeded 74% response, whilst the response has stabilized around 12.5% representing the quality of the services and the promptness of the system towards resolving operations problems. The relevance of the system was also confirmed by operational performance indicators: there was a reduction of food waste, as well as an improvement of 8.2 to 9.1 on the 10-point social satisfaction scale and a reduction of food and service recovery time by approximately 50%. Dessert and hot line teams were the best-performing at the station level, and an improvement in pasta and grill stations became evident after corrective interventions.

The review affirms that organized professional growth coupled with real-time performance information improves organizational performance and leadership abilities. The system presented the chefs with actionable insights as well as with a sense of recognition that created motivation and unity within the team by linking guest experiences directly to the operations taking place in the kitchen. Notably, the results also emphasize that leadership in the contemporary kitchen is not just about cooking excellence, but about cost management, staff development, operational innovation, and guest-centered approaches.

Finally, this paper identifies the topicality of integrating culinary practice with executive leadership models and illustrates how digital advancements may expedite that process. The novelty of the Open Plate system lies in its ability to bridge the gap in assumptions between guest appraisal and kitchen practice and provides an example of performance improvement and leadership development. In the case of hospitality organizations, results demonstrate the strategic value of investments in the development of chefs as leaders and artisans.

The next step of research is to widen the scope of the analysis to other forms of hospitality operations, investigate the longitudinal effects of such systems on career advancement, and to include comparative research to other culture situations. In the case of practitioners, the results suggest the implementation of combined development models of professional development complexes (integration of technical and executive skills of the leaders supported by real-time feedback). This strategy enhances the operational performance and also reinvents the role of the chef as the core driver of both memorable guest experiences and sustainable organizational

performance.

Rather than positioning Open Plate as a stand-alone innovation, this study emphasizes the broader value of feedback systems for professional development. By combining guest reviews, digital dashboards, and peer recognition, hospitality organizations can create sustainable pathways for chefs to evolve into strategic leaders.

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Patents: None.

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