



Understanding Coravin: A Qualitative Study Of Implementation For Wine-By-The-Glass At Raffles Bali

Ikhsan Nur Fakhru¹, Ni Luh Eka Armoni², Made Satria Pramanda Putra³, I Ketut Suja⁴,
Nyoman Mastiani Nadra⁵, I Gusti Bagus Rai Utama^{6*}

^{1,2,3,4,5} Politeknik Negeri Bali

⁶ Universitas Dhyana Pura

*Penulis Korespondensi: raiutama@undhirabali.ac.id

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Abstract: *Purpose: This study aims to explore the implementation of Coravin technology for wine-by-the-glass at Raffles Bali. Design/methodology/approach: This research used qualitative approach with purposive technique to define the informants. Findings: The implementation of Coravin technology has successfully implemented, enabling a broader wine selection, enhancing experiences through tastings and pairings, and transforming service into an educational journey. Key benefits include extended shelf life, reduced waste, and brand differentiation, driven by staff training and operational integration. However, certain aspects remain underutilized, prompting recommendations for management evaluation. Suggested improvements include expanding Coravin training, developing tasting events and storytelling scripts.*

Keywords: Coravin Technology, Wine-By-The-Glass, Raffles Bali, Qualitative Approach, Operational Integration



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INTRODUCTION

The global wine industry is shifting toward experiential consumption, increasing demand for wine-by-the-glass options in luxury hospitality. Raffles Bali initially used vacuum pump technology for wine preservation from 2020 to 2022, but in 2023-current, the establishment adopted the advanced Coravin system, which uses a thin needle and argon gas to pour wine without removing the cork. This technology significantly extended the shelf life of premium wines and reduced oxidation.

Existing academic literature lacks qualitative, context-specific research on Coravin implementation in luxury hotel operations, particularly in Indonesia. No formal evaluation has been conducted at Raffles Bali to assess operational impact, staff perceptions, or strategic implications, leaving a gap between anecdotal success and empirical understanding. The primary challenge involves integrating the technology into a high-service environment, requiring staff training, workflow adaptation, guest education, and alignment with brand standards.

The absence of systematic evaluation hinders the hotel's ability to optimize the technology and make informed strategic decisions for future beverage programming. Key

operational benefits include reduced waste, expanded premium wine-by-the-glass offerings, and experiences. However, successful adoption depends on addressing perceptual and procedural integration issues within daily operations. Therefore, structured analysis is essential to determine Coravin's true contribution and to replicate success across other luxury hospitality settings.

LITERATURE REVIEW

Coravin technology addresses the long-standing challenge of preserving wine quality after opening by allowing wine to be poured without removing the cork, using a thin needle and argon gas to prevent oxidation (Neilenko & Tsyrylyk, 2024). Wine shelf life depends on factors such as retention of initial flavours and resistance to aroma changes caused by temperature fluctuations and chemical reactions like ester hydrolysis (Mercanti et al., 2024). The Coravin system, which includes a head fixed on the bottle neck with a wine needle and handle, enables long-term preservation of an opened bottle's original taste and quality properties (Neilenko & Tsyrylyk, 2024). Its effectiveness is measured through a comprehensive index, shelf-life extension, quality profile, and practical impact (Neilenko & Tsyrylyk, 2024).

The wine-by-the-glass concept has become a strategic component of luxury hospitality, shifting from a simple beverage option to a curated guest experience focused on personalization and exploration (Pechey et al., 2016)(Torrico et al., 2020). By offering diverse selections from basic to premium labels, hotels enable guests to sample different wines without committing to a full bottle, while sommeliers act as narrative guides explaining provenance and winemaking artistry (Pechey et al., 2017). The strategic design of wine lists, including glass size and portioning, influences consumer purchasing behaviour and perceived value, justifying premium pricing for individual glasses (Pechey et al., 2017)(Dearden et al., 2021). A successful wine-by-the-glass program not only enhances revenue but also fosters emotional connections with guests, embedding the hotel into the local cultural and social fabric (Pechey et al., 2016).

METHOD

This research was conducted at Raffles Bali, a luxury hotel in Jimbaran, Bali, focusing on the Food and Beverage Department's beverage division to investigate the implementation of Coravin technology for wine-by-the-glass service. The research object is the implementation of Coravin Technology for wine-by-the-glass at Raffles Bali, with two identified variables: Coravin Technology as a Wine Preservation System and Wine-by-the-Glass Concept. Each variable was operationally defined using specific dimensions and indicators derived from previous studies, such as comprehensive index, shelf-life extension, quality profile for Coravin, and internal management, market strategies, consumer preferences, and global trends for sales performance. Both qualitative and primary data were collected through observations, interviews, and documentation.

Data sources included primary data from interviews and observations with three key informants-the Director of Culinary, Sommelier, and Bar Captain-selected through purposive sampling based on their expertise, as well as secondary data from documentation, journals,

wine lists, standard operating procedures. Data collection methods consisted of participant observation, where the researcher actively engaged in the natural setting; semi-structured interviews designed to elicit in-depth perspectives on the technology's implementation; and documentation, which included photographs, videos, and written records of Coravin-related activities. The interview process emphasized an asymmetrical relationship where the researcher deliberately steered the conversation to uncover participants' feelings, perceptions, and thoughts regarding the implementation.

Data analysis followed the interactive model of Miles, Huberman, and Saldaña, comprising three stages: data condensation (selecting strong, accurate, and accountable data from interviews, observation notes, and records), data display (organized presentation through photographic documentation and wine lists), and conclusion drawing and verification. The verification process focused on identifying key findings, including changes in service workflow, transformation of staff into confident educators, reduction of perceived risk for premium wine experimentation, contribution to wine sales through wine-by-the-glass offerings, establishment reputation as an innovative wine destination, and demonstration of technology reliability. The research period spanned from February to July 2026, providing a structured timeframe for data collection and analysis.

FINDINGS AND DISCUSSION

The implementation of Coravin technology at Raffles Bali began in 2023, replacing the previous vacuum pump system used from 2020 to 2022. The new system allows wine to be poured without removing the cork, using a needle and argon gas to prevent oxidation. Staff training, including mandatory two-hour sessions and pre-service refreshers, ensured beverage attendants could operate the device effectively. This integration transformed daily workflows, enabling beverage attendants to serve premium wines by the glass without fear of spoilage.

Coravin significantly extended wine shelf life, achieving a comprehensive quality index and preserving opened bottles for an average of 27 days. This performance far exceeded the vacuum pump method, which only maintained quality for about one week. The technology maintained sensory qualities such as taste, aroma, and freshness better than alternatives, making it ideal for luxury wine service. Consequently, wine waste was drastically reduced, directly supporting the expansion of premium wine offerings across all dining outlets.

Premium wine categories demonstrated the highest contribution to wine-by-the-glass sales after Coravin implementation, outperforming basic and mid-range selections. The hotel introduced premium offerings such as Grand Cru classifications and rare vintages, which guests could now enjoy by the glass without buying a full bottle. Specific premium labels included Chablis Grand Cru, Corton Grand Cru, and Pomerol, among others, offered in half glass tasting portions. This expansion transformed the wine program into a dynamic platform for oenological exploration and guest experimentation.

Guest behaviour shifted positively, with reduced perceived financial and social risk encouraging trial of higher-priced wines. Beverage attendants noted that guests became more receptive to staff recommendations and premium wine pairings, leading to higher

average check values. The ability to offer tasting flights and personalized pairings enhanced guest satisfaction and loyalty.

Internal management strategies, including wine list redesign and staff-led promotions, played a crucial role in driving sales. Consumer preferences shifted toward broader brand, vintage, and region selections, while global trends in wine imports enabled more diverse offerings. Researchers recommend expanding Coravin training, enhancing guest engagement through tasting events, and using marketing to promote the technology, while future studies should explore cross-cultural comparisons and long-term profitability impacts.

Table 1. Coding Interview

No	Code	Source	Category
1	Vacuum pump technology	A1, A2, A3	Old Technology
2	Removes oxygen from the open bottle	A1, A2, A3	Old Technology
3	To slow oxidation	A1, A2, A3	Old Technology
4	Reducing wine spoilage and waste	A1, A2	Coravin Ability
5	Expand wine by the glass program	A1, A2	Coravin Ability
6	Allow to pour the wine without removing the cork	A1, A2, A3	Coravin Ability
7	Implementation since in 2023	A1, A2, A3	Timeframe
8	Staff training	A1, A2, A3	Implementation process
9	Operational adjustment	A1, A2, A3	Implementation process
10	Workflow transformed	A1, A2, A3	Implementation process
11	Integrating into daily workflow	A1, A2, A3	Implementation process
12	Service procedure	A1, A2, A3	Implementation process
13	Beverages attendants as wine educators	A1, A2, A3	Implementation process
14	Serve premium wine by the glass to the table or bar counter	A1, A2	Implementation process
15	Serve premium wine by the glass	A1, A2	Implementation process
16	Participated person of implementation are Director Culinary, Sommelier, and Bar Captain	A1, A2, A3	Implementation process
17	Beverages attendants (Sommelier and Bar Captain) are the main person responsible for Coravin usage	A1, A2, A3	Implementation process
18	Narrative (simple transaction to an experiential and educational journey)	A1, A2, A3	Implementation process
19	Beverage attendants transform from a confident storyteller to wine educator	A1, A2, A3	Implementation process

Notes: A1: Informant 1 (Bar captain), A2: Informant 2 (Sommelier), A3: Informant 3 (Director of Culinary). Source: Researcher

CONCLUSION

The implementation of Coravin technology at Raffles Bali has been effectively integrated into wine-by-the-glass service, transforming workflows and empowering beverage attendants as wine educators. Key success factors include comprehensive staff training, guest education, and strategic alignment with the hotel's luxury brand standards. This operational shift not only reduces wine waste but also expands premium wine offerings, elevating guest engagement through personalized wine storytelling. Consequently, Raffles Bali reinforces its reputation as an innovative wine destination, where every pour reflects both technical precision and authentic hospitality. Premium wine categories have demonstrated the most substantial contribution to sales growth, allowing Raffles Bali to cater to discerning guests seeking unique, high-end wine experiences without committing to a full bottle.

For Raffles Bali management, the researcher recommends expanding Coravin training programs to include more beverage and food service staff to ensure consistent quality. Additionally, developing tasting menus, pairing events, and leveraging social media promotions can enhance guest engagement and attract wine enthusiasts. For academic and industry contexts, further longitudinal research is needed to assess long-term profitability and guest loyalty, while hospitality curricula should integrate wine preservation technology into training programs. Future researchers are encouraged to explore cross-cultural comparisons across luxury hotels in Southeast Asia and use larger datasets to correlate Coravin use with specific sales metrics and guest satisfaction scores.

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