

An Integrative Model of Music Royalty Determination: Mathematical and Sharia Economic Perspectives

Agus Miftakus Surur¹, Hatıra Günerhan², Alwi Musa Muzaifyin³, Pandi Rais⁴

Agus Subandono⁵, Sri Pujilestari⁶

^{1,3,4} Universitas Islam Negeri Syekh Wasil Kediri, Indonesia

² Kafkas University, Turkey

⁵ Universitas Pwyatan Daha Kediri, Indonesia

⁶ Universitas Islam Negeri Maulana Malik Ibrahim Malang, Indonesia

Email: surur.math@gmail.com¹, gunerhanhatira@gmail.com², alwymuhammad765@gmail.com³,
pandirais.10@gmail.com⁴, virgokuragil17@gmail.com⁵, lestari.elsurury@gmail.com⁶

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Abstract:

Music royalties remain a crucial yet often debated issue in Indonesia's café and restaurant sector, especially in Muslim-majority regions where legal obligations intersect with Sharia economic principles. Previous studies tend to address royalty disputes from either a legal or religious angle, leaving a gap for an integrated approach. This study seeks to fill that gap by combining a quantitative revenue estimation model with *fiqh muamalah* analysis to determine royalty obligations. Using Strong Coffee café as a case study, the research applies a descriptive-quantitative method. Data collection is based on operational assumptions, including average spending per customer, turnover rate, adequate seating capacity, and the applicable royalty tariff. Revenue is estimated by calculating monthly income derived from seat capacity and daily utilization, followed by a proportional royalty assessment. Findings indicate that with 69 seats, a three-time daily turnover, and an average spending of IDR 11,000, the café's monthly revenue reaches approximately IDR 31.7 million, resulting in a royalty payment of IDR 345,000. The study presents a novel perspective: royalty compliance constitutes not only a legal requirement but also a moral and religious duty under Sharia, thereby reinforcing business ethics and consumer trust. The paper concludes with recommendations for regular internal audits and Sharia-based outreach programs for policymakers.

Keywords: *music royalties, Sharia economics, mathematical model, café business, intellectual property*

Abstrak:

Royalti musik tetap menjadi isu penting sekaligus diperdebatkan dalam industri kafe dan restoran di Indonesia, terutama di wilayah mayoritas Muslim di mana kewajiban hukum beririsan dengan prinsip ekonomi syariah. Studi terdahulu umumnya membahas persoalan royalti dari sisi hukum atau agama secara terpisah, sehingga menyisakan celah bagi pendekatan terpadu. Penelitian ini bertujuan mengisi celah tersebut dengan mengombinasikan model estimasi pendapatan kuantitatif dan analisis fikih muamalah untuk menentukan kewajiban royalti. Studi kasus dilakukan di kafe *Strong Coffee* dengan menggunakan metode deskriptif-kuantitatif. Data dianalisis berdasarkan asumsi operasional meliputi rata-rata belanja per pelanggan, tingkat perputaran kursi, kapasitas efektif tempat duduk, serta tarif royalti yang berlaku. Perhitungan dimulai dari pendapatan bulanan hasil pemanfaatan kapasitas kursi, kemudian diturunkan ke jumlah kewajiban royalti. Hasil menunjukkan bahwa dengan 69 kursi, tiga kali perputaran harian, dan rata-rata belanja Rp 11.000, pendapatan bulanan mencapai sekitar Rp 31,7 juta dengan kewajiban royalti sebesar Rp 345.000. Temuan ini menegaskan kebaruan perspektif: kepatuhan royalti bukan hanya



kewajiban hukum, tetapi juga tanggung jawab moral-religius dalam syariah, sehingga memperkuat etika bisnis dan kepercayaan konsumen. Penelitian menyarankan audit internal rutin bagi pelaku usaha serta sosialisasi berbasis syariah bagi pembuat kebijakan.

Kata kunci: *royalty musik, ekonomi syariah, model matematika, usaha kafe, hak cipta*

Correspondent surur.math@gmail.com (Agus Miftakus Surur)

Author:

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Introduction

Music plays a crucial role in shaping the atmosphere, customer experience, and brand image of cafés and restaurants, functioning both as entertainment and as a marketing strategy that can extend patrons' dwell time and increase sales (Jain & Bagdare, 2011; Srivastava & Kaul, 2014). In Indonesia, this is evident in establishments like Strong Coffee, which relies on background music rather than live performances to enhance its service, reflecting a broader industry trend where music is a key business asset (Brodsky, 2011; LMKN, 2023). Despite the clear economic value of music and regulations mandating royalty payments, many business owners remain reluctant to comply due to misconceptions that streaming music is free, limited socialisation of legal requirements, and uncertainty about royalty distribution (Aguiar, 2017), underscoring the gap between regulatory frameworks and actual business practices.

One of the primary concerns among business operators is the perception that the royalties they pay do not necessarily reach the actual creators or copyright holders (Hesmondhalgh et al., 2021). This criticism relates to the transparency of royalty distribution systems managed by Collective Management Organizations (CMOs). In some cases, a disconnect exists between the music being played and the creators receiving payment, raising doubts about the fairness of the system (Hughes & Merges, 2016). From the perspective of *fiqh muamalah*, such circumstances may fall under the category of *gharar* (uncertainty), which should be avoided in contractual agreements (Farikhin & Mulyasari, 2022). Nevertheless, there are also business operators who comply with royalty payment regulations as an expression of legal obedience and moral responsibility (Lokanan, 2023). Awareness of legal requirements, a strong business reputation, and positive relationships with the creative community often drive such compliance. In the context of *Strong Coffee*, adherence to royalty payments can enhance business image and legal legitimacy while avoiding potential criminal or civil sanctions.

Under Indonesian law, copyright is protected through Law No. 28 of 2014 and Government Regulation No. 56 of (*Peraturan Pemerintah (PP) Nomor 56 Tahun 2021 Tentang Pengelolaan Royalti Hak Cipta Lagu Dan/Atau Musik*, 2021), which mandates business operators using music commercially to pay royalties via Collective Management Organisations (CMOs) (Ayu Palar et al., 2025). From an Islamic legal perspective, creative works are recognised as *huquq al-mu'allif* (author's rights) and constitute a form of intellectual ownership (*al-milkiyyah al-fikriyyah*) (Nadiaturrahmi, 2025), grounded in Qur'an Surah An-Nisa' [4]:29, which prohibits unjust consumption of another's wealth, and the Prophet's ﷺ hadith that a Muslim's property is only lawful

with their consent (Ahmad & Abu Dawud). The fiqh maxim *al-kharāj bi al-damān* further affirms that any economic benefit must be accompanied by corresponding obligations, meaning that businesses profiting from music are responsible for royalty payments as both a legal and ethical duty.

This study presents novelty by integrating three dimensions: mathematical analysis using real data from Strong Coffee (number of seats, menu prices, occupancy rates, and revenue) to calculate proportional royalty burdens and reveal economic implications; the legal framework established by Law No. 28 of 2014 and Government Regulation No. 56 of 2021 that regulate royalty obligations and penalties; and Islamic legal principles situating intellectual property rights within *fiqh mu'amalah* and relevant maxims. This integration not only offers business operators a replicable model for balancing revenue, fairness, and compliance with both state law and Shariah but also contributes academically to interdisciplinary discourse across economics, law, and Islamic studies. Furthermore, it aligns with calls for compliance-by-design in royalty systems (U.S. Copyright Office, 2014), the need for fair valuation of musical works (Boyer, 2017), and the recognition of intellectual property as *māl* under *maqāsid al-shari'ah*, particularly *hifz al-māl* (Hada et al., 2021; Maqasid, 2025).

In the Indonesian context, there is a need to integrate these global findings with local realities, particularly concerning micro, small, and medium enterprises (MSMEs) in the café and restaurant sector (Cahya et al., 2025). This study presents a royalty calculation model based on operational variables, including seating capacity, occupancy rate, and turnover frequency, which produces outputs in the form of monthly/annual royalty estimates, as well as the proportion of royalties relative to revenue. Such a model is highly valuable for operational decision-making in business and for the formulation of public policy. For instance, it can assist in developing proportional royalty *tariff* structures, designing incentives or exemptions for MSMEs, and conducting "what-if" policy simulations to project the impact of tariff changes on compliance rates and creators' income.

This study aims to develop a royalty calculation model, analyze legal compliance, and examine the fiqh muamalah perspective. The mathematical model links variables such as average selling price, operational days, turnover rate, and occupancy level with optimal seating requirements and royalty estimation (Kumar & Chatterjee, 2013). Its outputs, ideal capacity to reach target revenue, estimated royalties as a percentage of revenue, and sensitivity thresholds for customer behavior, provide practical indicators for business owners and strategic input for policymakers (Surur et al., 2023). Thus, the model serves not only as a quantitative tool but also as a bridge between positive law and Sharia law in designing fair and measurable royalty policies.

Method

Research Approach (Case Study of *Strong Coffee*)

This study employs a case study approach to investigate the relationship between seating capacity, music royalty calculation, and the cost burden in relation to monthly revenue in a single café business unit, specifically *Strong Coffee* in Surakarta. *Strong Coffee* was selected because quantitative data are available and documented in a scientific publication covering the period from June to August 2020, including cost structures, revenues, profits, and the return on capital ratio (R/C ratio), making it suitable as a basis for parameterization in mathematical modeling and simple

managerial simulations. The case study approach is considered appropriate for capturing the specific operational context while allowing the derivation of practical implications that can be replicated by similar business operators (Akbarrizki & Zulfikhar, 2020).

Data Sources

The primary data source of this study is an academic report on the business performance of Strong Coffee over a three-month period (June–August 2020), which records an average monthly revenue of IDR 31,698,000 along with total costs, net income, and efficiency indicators, accessed via journal platforms and repositories to ensure traceability (Akbarrizki & Zulfikhar, 2020). These figures serve as the main inputs for the royalty calculation, which is further supported by the Indonesian legal framework, particularly Government Regulation No. 56 of 2021 on the Management of Song/Music Royalties and publications from the National Collective Management Agency (Lembaga Manajemen Kolektif Nasional, LMKN) that stipulate royalty rates for restaurants and cafés. In accordance with Government Regulation No. 56/2021, businesses playing music commercially are required to pay royalties, with cafés and restaurants typically subject to a rate of IDR 60,000 per seat per year for recorded music, ensuring that the simulation in this study is firmly based on the prevailing normative and operational framework (Peraturan Pemerintah (PP) Nomor 56 Tahun 2021 Tentang Pengelolaan Royalti Hak Cipta Lagu Dan/Atau Musik, 2021; Rachmalia, 2025).

Data Collection Technique

This study relies on desk research (library research) as the primary data collection technique. Relevant materials were gathered from academic journals, government regulations, official publications of the National Collective Management Agency (LMKN), and other credible repositories. This method enables the systematic identification, evaluation, and synthesis of existing data and legal frameworks, eliminating the need for direct fieldwork. It ensures both the accuracy of numerical inputs and the normative validity of legal references used in the royalty calculation model.

Formulas Used

This study formulates three groups of equations (Andini et al., 2024): (a) estimation of the "required" number of seats to achieve the observed revenue, (b) calculation of royalty costs based on the tariff per seat per year, and (c) determination of royalty burden as a percentage of revenue. These formulations enable a structured linkage between operational data, tariff regulations, and financial outcomes. Consequently, the method provides a replicable model for similar businesses, offering a transparent framework that can be adapted to different café or restaurant settings.

a) Estimation of the number of seats (S)

Monthly revenue is considered as the result of $capacity \times usage\ intensity \times average\ transaction\ value$. Using the following notation:

R = monthly revenue (IDR)

\bar{p} = average spending per customer (IDR/transaction)

D = number of operating days per month

T = seat/table turnover (number of times a seat is used per day)

u = average seat utilization rate (0–1)

The formula is:

$$R \approx S \times \bar{p} \times T \times D \times u \Rightarrow S = \frac{R}{\bar{p} T D u}$$

The definition of T (table/seat turnover) follows common restaurant management practice: it is the number of parties/customers served divided by the number of tables/seats available within a given period. This concept is widely used in the restaurant management literature ([Theforkmanager, 2024](#)).

b) Annual and monthly royalties

Using the LMKN tariff for cafés/restaurants (recorded music), $t = \text{IDR } 60,000/\text{seat/year}$, the formulas are:

$$\text{Royalti Tahunan (RT)} = t \times S$$

$$\text{Royalti Bulanan (RB)} = \frac{RT}{12}$$

Where RT is the annual royalty (IDR), and RB is the monthly royalty (IDR). The per-seat-per-year tariff follows the summarized provisions currently in force and communicated to business operators ([Rachmalia, 2025](#)).

c) Percentage of royalty burden relative to revenue

$$\% \text{Royalti} = \frac{RB}{R} \times 100\%$$

Assumptions Used

Since the primary source does not specify seating capacity, this study establishes a set of operational assumptions commonly applied in coffee shop analyses, namely: average spending per customer (p), number of operating days (D), turnover rate (T), utilization rate (u), and royalty tariff (t). These assumptions are designed to be transparent and can be tested through sensitivity analysis, enabling readers to observe the impact of parameter changes on the calculated number of seats and the resulting royalty burden.

Data Analysis

The methodological framework of this study consists of four stages: first, capacity calibration (number of seats), where the monthly revenue data of IDR 31,698,000 from Strong Coffee is combined with reference parameters ($p = 11,000$; $D = 30$; $T = 2$; $u = 0.7$) to estimate seating capacity consistent with observed revenue ([Akbarrizki & Zulfikhar, 2020](#)); second, royalty calculation, which computes annual and monthly royalties based on the calibrated capacity, thereby linking operational metrics with legal obligations under the prevailing regulatory framework ([Rachmalia, 2025](#)); third, royalty burden ratio calculation using the formula $\% \text{Royalti} = RB / R$ to determine the proportionality of royalties within the financial structure, as mandated by Government Regulation No. 56 of 2021; and fourth, sensitivity analysis by varying parameters (T , u , D , p) to project seating needs and changes in royalty burdens, recognizing that consumer behavior in cafés is dynamic while the per-seat annual tariff remains fixed ([Theforkmanager, 2024](#)).

Results And Discussion

Results

"Strong Coffee" Café (Surakarta)

An academic study conducted in Surakarta between June and August 2020 provides comprehensive data on Strong Coffee's menu prices, revenue, and cost structure, even though the number of seats was not specified. The café offered a range of beverages and snacks, such as robusta coffee priced at IDR 12,000, mocha Coffee at IDR 20,000, and snacks like french fries and cassava at around IDR 10,000, with other items reaching up to IDR 20,000, reflecting a pricing strategy aimed at diverse

customer segments. The study reported an average monthly turnover of IDR 31,698,000, daily sales of approximately IDR 1,056,600, and around 2,889 items sold per month, indicating a stable sales rotation and providing a clear picture of the café's operational scale and revenue potential. These findings, drawn from Akbarrizki & Zulfikhar (2020), form the empirical foundation for royalty calculations and business feasibility analysis.

Table 1

Summary of Findings – "Strong Coffee" (Surakarta)

Element	Description
Menu Prices	Based on the <i>Strong Coffee</i> study (June–August 2020)
Monthly Turnover	Available in the study (IDR 31,698,000/month)
Source Type	Academic journal data, not news media coverage
Number of Seats	Not specified; to be estimated through mathematical calculation

Note. Akbarrizki & Zulfikhar (2020).

The determination of the "ideal" number of seats begins with setting operational days per month (D), estimating average customer spending (\bar{p}) from turnover and transactions, and assessing the turnover rate (T) along with a target occupancy rate of around 60–80%. These parameters are then applied to the seat calculation formula to obtain the estimated seating capacity (S_s), which is rounded and adjusted by about ±10% to account for demand fluctuations. In this study, the "ideal" seat capacity is defined as the number of seats necessary to generate the observed monthly revenue under realistic assumptions of turnover, spending, and utilization levels.

- Average monthly revenue (R): IDR 31,698,000
- Average spending per transaction (\bar{p}) from observed data: \approx IDR 10,972, rounded to IDR 11,000
- Operating days per month (D): Example value, 30 days
- Turnover per seat per day (T): Assumed range 1.5–3, depending on customer flow speed
- Seat utilization (u): Ratio of occupied seats during operation, 0–1 (e.g., 0.6–0.8)

The general formula for projecting monthly revenue is:

$$R = (\text{jumlah kursi}) \times \bar{p} \times T \times D \times u$$

Rearranging to find the required number of seats:

$$S = \frac{R}{\bar{p} \times T \times D \times u}$$

Using \bar{p} =IDR 11,000, several common scenarios are computed (D = 30 or 26 days; T = 1.5, 2, 3; u = 0.6, 0.7, 0.8). Results are rounded to whole seats.

Table 2

Determination of the number of seats

D = 30 (Open every day)	
T=1.5, u=0.6 → 107 seats	T=2, u=0.8 → 60 seats
T=1.5, u=0.7 → 92 seats	T=3, u=0.6 → 54 seats
T=1.5, u=0.8 → 80 seats	T=3, u=0.7 → 46 seats
T=2, u=0.6 → 80 seats	T=3, u=0.8 → 40 seats
T=2, u=0.7 → 69 seats	

Note. The results of the researcher's calculations

Interpretation and Practical Recommendations, the findings can be distilled into actionable guidelines for café operators:

- Low turnover ($T \approx 1.5$; customers linger longer), A café would need a larger seating capacity (around 80–120 seats) to maintain the same revenue level.
- High turnover ($T \approx 2-3$) with good utilization ($u \approx 0.7-0.8$), The ideal number of seats can be significantly lower, approximately 40–70 seats.
- Realistic mid-range example for a small to medium café: With $T = 2$, $u = 0.7$, and $D = 30$, the required capacity is about 69 seats.

Therefore, to sustain a monthly revenue of approximately IDR 31.7 million under these operating conditions, a seating range of 65–75 seats would be a reasonable target.

Royalty Calculation

a) Input Data

- Average monthly revenue (R): IDR 31,698,000
- LMKN tariff per seat per year (t): IDR 60,000
- Average spending per customer (\bar{p}): IDR 11,000
- Operating days per month (D): 30
- Turnover per seat per day (T , assumed): 2
- Utilization rate (u , assumed): 0.7

b) Number of Seats (S)

$$S = \frac{R}{\bar{p} \times T \times D \times u} = \frac{31.698.000}{11.000 \times 2 \times 30 \times 0.7} \approx 69 \text{ seats}$$

c) Annual Royalty (RT)

$$RT = t \times S = 60.000 \times 69 = Rp 4.140.000$$

d) Monthly Royalty (RB)

$$RB = \frac{RT}{12} = \frac{4.140.000}{12} \approx Rp 345.000/\text{month}$$

e) Percentage of Revenue (%R)

$$\%R = \frac{RB}{R} \times 100\% = \frac{345.000}{31.698.000} \times 100\% \approx 1,09\%$$

Thus, under these assumptions, the royalty obligation would be around 1.09% of monthly revenue, which is relatively small compared to overall earnings.

Figure 1

Comparison of Number of Seats and Royalty Amount

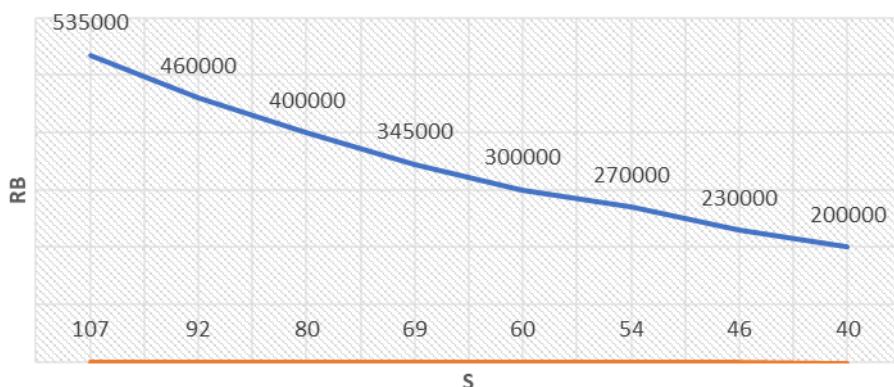


Figure 1 illustrates the proportional relationship between seating capacity and royalty obligations, demonstrating that even slight variations in seating arrangements can significantly impact a business's financial responsibilities. The case of the "Strong Coffee" Café and the mathematical calculation of royalties provide a clear quantitative

foundation for assessing the economic implications of copyright obligations; however, these results must be interpreted within legal, ethical, and religious frameworks to ensure that royalty payments are not only financially feasible but also aligned with Islamic jurisprudence, national law, and broader principles of social justice, thereby paving the way for the subsequent discussion of their normative implications.

Discussion

1. Fiqh Principles Based on Qur'anic and Hadith Evidence

Surah An-Nisa' [4]:29 prohibits taking another's property without consent, forming the Shar'i basis for protecting ownership, including intellectual property, and obligating royalty payments as respect for creators' rights (Rahmatian, 2011). This is reinforced by the maxim *al-asl fi al-mu 'āmalāt al-ibāhah illā mā dalla dalil 'alā tahrīmih*, which legitimizes licensing and royalties as permissible contracts (Rifai, 2022), and by *Sahih al-Bukhari* no – 5737, which validates compensation for services and, by analogy (*qiyas*), intellectual works. The maxim *al-kharāj bi al-damān* further affirms that creators deserve royalties as they bear the risks and costs of production (Salleh, A. D., & Jamaludin, 2023). Surah Al-Baqarah [2]:282 emphasizes the importance of documenting transactions, underscoring the need for clear and transparent royalty agreements. Unauthorized use constitutes *ghasb*, obligating restitution to avoid injustice (*zulm*) (Mappiasse & Asmuni, 2024; Tahir, 2024).

2. Legal and Ethical Interpretation

The payment of royalties represents not only compliance with positive law but also a moral and Sharia obligation to protect intellectual property rights (Meirison & Nazar, 2021), ensuring that copyrighted works are used with consent and fair compensation while avoiding *ghash* in Islamic jurisprudence. In practice, the royalty rate of approximately 1.09% of revenue is relatively low and manageable; however, the final amount should be determined through a licensing agreement that clarifies rights and obligations. Formalizing such agreements with details on scope, duration, and rates promotes fairness and transparency, aligning with Islamic values, and provides a firm legal foundation (Widjaja, 2025). In Indonesia, Law No. 28 of 2014 and Government Regulation No. 56 of 2021 mandate royalty payments, while the Sharia principle *lā yaḥillu mālu al-mar'i* reinforces that taking another's property without rightful cause is impermissible. Thus, fulfilling royalty obligations not only aligns with state law but also preserves moral integrity and invites spiritual blessing (*barakah*) for businesses (al-Qaradawi, 1997).

3. Broader Contextual and Normative Implications

The quantitative finding (\approx approximately 1.09% of monthly revenue) provides a measure of Strong Coffee Café's royalty burden, but its meaning lies in broader normative and contextual dimensions, including post-pandemic consumer shifts, evolving legal frameworks, and Islamic business ethics. Consumer behaviour in Indonesia and Malaysia has increasingly emphasized digital adoption, price sensitivity, and ethical consumption, with adaptations such as "entrepreneurial behaviour" (Tjiptono et al., 2022) and greater caution in discretionary spending (Sakapurnama, 2023), shaping cafés' revenue capacity and compliance. Legally, Indonesia's Copyright Law No. 28 of 2014 mandates royalties, while international scholarship affirms IP as legitimate property under both secular and Islamic law (Ebrahim, 2023; Manto, 2023). Ethically, Islamic principles of justice (*'adl*), truthfulness (*sidq*), and respect for rights (*huqūq al-'ibād*) frame unpaid royalties as unjust

appropriation, with *maqāṣid al-Shari‘ah* extending property protection to intellectual works (Ratnawati & Al Farizi, 2023). Thus, even modest royalties require strategies that are sustainable, lawful, and morally grounded, aligning financial practices with shifting consumer expectations, legal mandates, and ethical and religious obligations.

4. Sanctions for Non-Payment of Royalties

From the perspective of Islamic law, copyright and intellectual works are classified as *māl* (property) with legitimate value, making unauthorized use without compensation a form of *ghasb* (unlawful appropriation) (Al-Zuhaili, 2011). Qur'an 4:29 prohibits unjust consumption of wealth, requiring *ujrah mithl* (fair remuneration) (Samuelson et al., 2010; Soares et al., 2021), while the Prophet ﷺ affirmed that "the wealth of a Muslim is not lawful for others except with his willing consent" (Ahmad & Abu Dawud), framing copyright infringement as both legal and spiritual injustice, as further emphasized in the *hadīth* of the *muflis*. In parallel, Indonesian law obligates royalty payment under Law No. 28 of 2014 and Government Regulation No. 56 of 2021, with violations exposing offenders to civil, criminal, and administrative sanctions (Towse, 2006). Thus, integrating Islamic and national law reveals that non-payment of royalties is *ḥarām* and punishable, while compliance ensures *hifz al-māl*, justice in *mu‘āmalah*, and alignment with *maqāṣid al-shari‘ah*, fostering lawful, fair, and blessed business practices (Gillani & Farzand, 2024). The following table provides a structured comparison between Islamic law and national law in regulating royalty obligations.

Table 3
Comparison: Islamic Law vs. National Law

Aspect	Islamic Law	National Law (Indonesia)
Legal classification	<i>Ghasb</i> (unlawful appropriation), violation of intellectual property rights (<i>huquq al-mu‘allif</i>)	Violation of the economic rights of the creator/copyright holder
Primary legal basis	Qur'an, Surah An-Nisā' [4]:29; <i>Hadīth</i> narrated by Ahmad & Abū Dāwūd ("It is not lawful to take the property of a Muslim except with their willing consent")	Law No. 28 of 2014 on Copyright; Government Regulation No. 56 of 2021
Moral/Hereafter consequences	Sinful, obligated to pay restitution (<i>ujrah mithl</i>), may be held accountable in the Hereafter (<i>hadīth</i> of the <i>muflis</i>)	Not applicable in the afterlife (worldly domain only), but still constitutes unethical business conduct.
Worldly consequences	Required to compensate for the benefit unlawfully taken	- Civil: Damages as determined by the court - Criminal: Imprisonment up to 10 years and/or fines up to IDR 4 billion - Administrative: Warning, cessation of activities, business closure
Purpose of regulation	Preserve wealth (<i>hifz al-māl</i>) and uphold justice in financial dealings (<i>mu‘āmalah</i>)	Protect copyright and promote a sustainable creative ecosystem.

Note. researcher's

This comparison highlights the strong convergence between both legal systems in upholding creators' rights and sanctioning violations. It also underscores that integrating these frameworks not only enforces compliance but also strengthens the ethical and spiritual foundations of business practices.

5. Transformative Implications of Royalty Obligations

Although the royalty burden for Strong Coffee Café is modest (\approx approximately 1.09% of monthly revenue), its implications extend far beyond finances, shaping economic, legal, ethical, and social dimensions. Economically, royalty obligations instill financial discipline by recognizing intellectual property as a recurring cost while enhancing brand trust and loyalty in line with post-pandemic consumer demand for ethical practices (Ibrahim & Fakrulloh, 2025). Legally, compliance situates businesses within copyright frameworks, reduces litigation risks, and strengthens the creative ecosystem through fair compensation and predictability (Ibrahim & Fakrulloh, 2025). Islamic jurisprudence also legitimizes intellectual property under concepts such as *haq al-ibtikar* (right of invention) and *mal mutaharrik* (movable wealth), thereby reinforcing the protection of rights (Asari et al., 2023; Ratnawati & Al Farizi, 2023). Ethically, royalty payments reflect '*adl*, *amānah*, and *ihsān*', acknowledging the creators' labor, while MUI *fatwas* affirm such compliance as not only lawful but also commendable under Shariah (Intellectual Property Rights in Sharia Economic Law and Fatwa of MUI, 2005). Socially, compliance reduces inequities, builds respect for creative labour, and fosters fairness as a social norm, whereas non-compliance risks devaluing cultural work and discouraging innovation (Meirison, 2021).

6. Practical Recommendations

This research corroborates and extends prior scholarship by demonstrating that royalty payments function not only as legal obligations but also as ethical, economic, and social levers of transformation. Studies such as Ratnawati & Al Farizi (2023) affirm that intellectual property in Islamic law, grounded in *haq al-ibtikar*, deserves recognition as legitimate property, while Sardjono et al. (2016) highlight transparency and legal certainty in LMKs as key to compliance and trust, findings echoed in the Strong Coffee Café case, where a modest \approx 1.09% royalty burden holds profound normative implications. From these insights, several recommendations emerge: raising awareness through campaigns and guides (Hada et al., 2021; Surur et al., 2023), developing Sharia-compliant contract models that ensure equity and avoid *gharar* or *riba* (Purwaningsih et al., 2022), enhancing LMK transparency through reporting and oversight, and clarifying stakeholder responsibilities while integrating Islamic principles of justice and fairness into regulation (Febrian et al., 2025). Ultimately, royalty compliance integrates economic rationality, legal certainty, Islamic ethics, and social justice into a holistic framework, positioning small payments as opportunities for fairness, sustainability, and moral progress (Kamali, 2008; Nasution & Judijanto, 2024; Sadiman et al., 2011), while future research should harmonise *fiqh muamalah* with copyright law and foster state-Islamic institutional collaboration to strengthen guidelines and ensure just post-pandemic business practices.

Conclusion

This study shows that integrating mathematical analysis with a *Shariah* perspective provides both quantitative certainty and moral legitimacy in determining music royalty obligations. Using the case of Strong Coffee café, with an adequate seating capacity of 69 seats, a daily turnover rate of three, and an average customer spending of IDR 11,000, the estimated monthly revenue reaches about IDR 31.7 million, resulting in a royalty obligation of roughly IDR 345,000 under the LMKN tariff of IDR 60,000 per seat per year. This model provides business owners with a clear financial outlook for cost allocation, without disrupting operations. However, the

study remains limited due to the scarcity of openly available secondary data on royalty practices and LMKN compliance, which restricts the analysis to case-based estimations. Future research is therefore encouraged to conduct field observations and collaborate with businesses willing to share operational data, thereby enabling more profound insights into the implementation of royalties, compliance challenges, and the practical integration of *Shariah* principles.

From the *Shariah* perspective, the obligation to pay royalties aligns with *fiqh muamalah* principles that recognize copyright as a legitimate form of *māl* (property) protected by Islamic law. The principle of *al-kharāj bi al-damān* affirms that a corresponding obligation must accompany any benefit derived from a right, while the maxim *lā yahillu mālu al-mar'i illā bi ṭib nafsihi* prohibits taking another's property without consent. Qur'anic and Prophetic evidence further reinforces that paying royalties is not merely an administrative duty under positive law, but also a religious trust that safeguards creators' rights. In this sense, demonstrating compliance with both legal and religious obligations can enhance a business's reputation, signaling integrity and responsibility to consumers. Such positioning may translate into competitive advantage, especially in communities that value *Shariah*-compliant practices.

The findings suggest that café and restaurant owners should view royalty obligations as a sustainable business expense, supported by internal audits of seating capacity, occupancy rates, and average customer spending. In Muslim-majority areas, *Shariah*-based justifications may also serve as a marketing tool to build consumer trust and compliance. Although this study is limited to a single case source due to restricted data access, it highlights the importance of addressing such constraints in future research. For policymakers, especially the Directorate General of Intellectual Property and LMKN, the study emphasizes the need for stronger public outreach, digital tools for self-generated royalty estimates, and transparent royalty distribution, complemented by *Shariah*-based educational initiatives that integrate *fiqh muamalah* to align legal and religious commitments and promote wider compliance.

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