

## ALGORITHMIC HALAL VISIBILITY: PRODUCING RELIGIOUS LEGITIMACY IN DIGITAL STREET-FOOD PLATFORMS

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### Abstract

*This study aims to examine how algorithmic aesthetics shape the production of halal-oriented digital spaces in street-food promotion across social media platforms and to explain how halal becomes visible, recognizable, and socially trusted within algorithmically mediated environments. Employing a qualitative approach, the research integrates virtual ethnography and Critical Discourse Analysis (CDA) to analyze 48 digital content items, 1,284 audience comments, 116 captions and metadata entries, 90 visual screenshots, and in-depth interviews with street-food vendors featured on Instagram, Facebook Reels, and YouTube. The findings reveal that halal no longer operates solely as a legal category verified through formal certification but is produced through the interaction of three interconnected dimensions: spatial practices, representations of space, and representational spaces. Within this process, visual cleanliness, transparency, ethical labor, and Islamic moral cues function as communicative resources through which audiences construct trust and recognize halal legitimacy. The study further demonstrates that platform logics, visual aesthetics, and algorithmic mechanisms influence which representations of halal achieve greater visibility and public recognition. This research is limited to a selected number of social media accounts and platforms within the Indonesian context and therefore may not fully capture variations across different cultural and technological settings. Practically, the findings provide insights for food entrepreneurs, digital content creators, and policymakers regarding the growing importance of digital visibility in shaping public trust and perceptions of halal authenticity. The originality of this study lies in the development of the concept of Algorithmic Halal Visibility, which explains how religious legitimacy is produced through the interaction of everyday practices, symbolic representations, audience participation, and platform infrastructures in contemporary digital societies.*

**Keywords:** Algorithmic Halal Visibility, Digital Religious Legitimacy, Platformization, Digital Religion, Street-Food Culture

### PUBLIC INTEREST STATEMENT

This study explores how halal values are communicated and recognized within digital street-food promotion on social media platforms. While halal is traditionally associated with religious certification, the findings show that audiences increasingly interpret halal through

visible cues such as cleanliness, trustworthiness, ethical conduct, and digital storytelling. By introducing the concept of *algorithmic halal visibility*, this research demonstrates how platform algorithms, audience engagement, and visual aesthetics influence the public recognition of halal practices. The study contributes to understanding the growing role of digital media in shaping religious legitimacy, consumer trust, and everyday economic practices in contemporary Muslim societies.

## INTRODUCTION

The rapid expansion of digital media has fundamentally transformed how everyday practices, including food consumption and religious expression, are produced, circulated, and interpreted globally. According to We Are Social and Hootsuite (2024), more than five billion people worldwide actively use the internet, with social media platforms increasingly functioning as socio-technical infrastructures that shape cultural visibility, economic interaction, and public meaning-making. Within these environments, digital platforms are no longer merely channels of communication but spaces where identities, values, and social legitimacy are continuously negotiated. This transformation is particularly evident in food-related content, where culinary practices are mediated through visual storytelling, algorithmic recommendation systems, and participatory engagement. In Muslim-majority societies such as Indonesia, food is not only an economic and cultural commodity but also a religiously significant practice closely associated with halal values. While halal traditionally refers to what is permissible under Islamic law, it also functions as a marker of trust, cleanliness, ethical responsibility, and moral consumption. As food promotion increasingly shifts to digital platforms, halal is no longer communicated solely through institutional certification but also through images, narratives, and audience interactions that shape public perceptions of legitimacy and trust.

Existing scholarship has examined these developments from several disciplinary perspectives. Research in platform and digital media studies demonstrates that online visibility is increasingly governed by algorithmic systems that privilege engaging, aesthetically appealing, and platform-compatible content (Couldry & Hepp, 2020; Bishop, 2021). Similarly, studies of food cultures highlight how visual storytelling, affective engagement, and participatory interaction shape audience perceptions and consumption practices (Abidin, 2020; Johnston & Goodman, 2021). At the same time, halal studies have predominantly focused on certification systems, regulatory governance, consumer behaviour, and market compliance, often conceptualising halal as a stable and verifiable category. Meanwhile, digital religion scholarship has explored how Islamic values, authority, and religious communication are mediated through online platforms. Although these strands of literature provide valuable insights, they remain fragmented and largely disconnected. Studies of halal rarely engage with algorithmic visibility, platform studies seldom address religious legitimacy, and digital religion research tends to prioritise da'wah and authority while overlooking everyday economic practices. Consequently, existing literature provides only a partial understanding of how halal is communicated and recognised within digitally mediated environments.

This fragmentation reveals a significant research gap. While previous studies explain how algorithms shape visibility, how halal certification establishes religious legitimacy, and how digital media transform religious communication, little attention has been given to how halal itself becomes visible, recognisable, and socially trusted within platform-driven environments. More

specifically, existing scholarship has yet to explain how religious legitimacy is constructed through the interaction between everyday practices, symbolic representations, audience engagement, and algorithmic infrastructures. Theoretical approaches to halal, digital religion, and platform visibility have largely developed in isolation, creating an unresolved tension regarding the mechanisms through which religious meanings acquire credibility in contemporary digital spaces. As a result, there remains limited understanding of how informal economic actors, such as street-food vendors, negotiate halal values within digital ecosystems where visibility is increasingly conditioned by platform logics and algorithmic curation.

In response to this gap, this study aims to examine how algorithmic aesthetics shape the production of halal-oriented street-food spaces on digital platforms and how halal becomes publicly visible, recognisable, and socially trusted within algorithmically mediated environments. Specifically, the study addresses the following research questions: (1) How are halal meanings constructed and represented in digital street-food content? (2) How do platform logics and algorithmic aesthetics influence the visibility of halal-oriented representations? and (3) How do audiences interpret and negotiate halal legitimacy through digitally mediated interactions? By investigating these questions, the study seeks to provide a more comprehensive explanation of how religious values are produced and negotiated within contemporary digital public spaces.

This study offers several original contributions to the literature. Theoretically, it introduces the concept of algorithmic halal visibility, which conceptualises halal not merely as a legal or regulatory category but as a socially produced form of legitimacy emerging through the interaction of moral practices, symbolic representations, audience engagement, and platform infrastructures. Empirically, the study provides evidence from street-food vendors as informal economic actors, a group that remains underrepresented in both halal studies and digital religion scholarship. Methodologically, it combines Henri Lefebvre's theory of the production of space with Teun A. van Dijk's Critical Discourse Analysis to examine how religious meanings are spatially produced and discursively negotiated within digital environments. By bridging platform studies, halal studies, and digital religion, the study contributes a new analytical framework for understanding how religious legitimacy is constructed, circulated, and recognised in the age of algorithmic media.

## LITERATURE REVIEW

### Conceptual Framework

This study is grounded in Henri Lefebvre's Theory of the Production of Space, which serves as the grand theory for explaining how halal-oriented digital street-food spaces are socially produced and negotiated. Lefebvre (1991) conceptualizes space as a social product emerging through the interaction of three interconnected dimensions: spatial practices, representations of space, and representational spaces. Spatial practices refer to routine activities through which social actors reproduce everyday life; representations of space refer to dominant structures, systems, and organizing logics that shape social interactions; and representational spaces refer to lived meanings, symbols, and experiences that individuals attach to particular spaces. In the context of digital platforms, these dimensions provide a useful framework for understanding how halal is constructed through everyday content production, structured by platform logics, and interpreted through audience engagement. To strengthen the analysis of meaning construction, this study also incorporates van Dijk's Critical Discourse Analysis (1993; 2008), which explains

how discourse, ideology, and power relations shape social legitimacy. Integrating Lefebvre's spatial theory with platform studies (Couldry & Hepp, 2020; Bishop, 2021) and digital religion scholarship (Campbell & Evolvi, 2020; Tsuria, 2022), this study conceptualizes halal not merely as a legal or institutional category but as a socially negotiated form of legitimacy emerging through the interaction of everyday practices, symbolic representations, and algorithmically mediated visibility.

### **Research Propositions**

Existing studies demonstrate that digital visibility is increasingly governed by algorithmic systems that privilege engagement, visual attractiveness, and emotional resonance (Bishop, 2021; Kaye et al., 2022). Research on halal consumption further suggests that trust, symbolic cues, and moral responsibility play a significant role in shaping public perceptions of halal beyond formal certification (Fischer, 2021; Wilson & Liu, 2022). Meanwhile, digital religion scholars argue that religious legitimacy is increasingly mediated through digital communication and participatory cultures rather than solely through institutional authority (Campbell & Evolvi, 2020). Synthesizing these perspectives, this study proposes that halal visibility in digital street-food environments is produced through the interaction of three dimensions. First, halal is enacted through spatial practices involving food preparation, hygiene, and everyday economic interactions. Second, halal is performed through representations of space shaped by platform algorithms, content formats, and visual aesthetics. Third, halal is validated within representational spaces through audience engagement, interpretation, and social recognition. Based on these arguments, the study advances the following research proposition:

**P1:** Halal legitimacy in digital street-food environments is socially produced through the interaction of spatial practices, algorithmic representations, and audience interpretations, resulting in what this study conceptualizes as *algorithmic halal visibility*.

### **Research Model**

Based on Lefebvre's triadic framework and insights from platform studies and digital religion, the research model positions Spatial Practices, Representations of Space, and Representational Spaces as three interrelated dimensions that collectively shape Algorithmic Halal Visibility. Spatial practices encompass food preparation, hygiene practices, and vendor-consumer interactions. Representations of space include platform algorithms, interface structures, content formats, and visual aesthetics that regulate visibility and circulation. Representational spaces capture audience interpretations, engagement, trust formation, and symbolic recognition of halal values. The interaction among these dimensions produces algorithmic halal visibility, which subsequently contributes to the construction of Digital Religious Legitimacy. The model illustrates that halal legitimacy is not derived solely from institutional certification but emerges through the dynamic relationship between everyday practices, mediated representations, audience participation, and platform infrastructures.

## **METHOD**

### **Research Design**

This study employs a qualitative research approach within a critical interpretive paradigm to examine how halal-oriented digital street-food spaces are produced and negotiated within

platform-driven environments. A qualitative design was selected because the study seeks to understand meanings, representations, and legitimacy-building processes that cannot be adequately captured through quantitative measurements. Specifically, the research integrates virtual ethnography and Critical Discourse Analysis (CDA) to investigate how everyday digital practices, platform infrastructures, and audience interactions collectively shape the visibility of halal in social media environments. Virtual ethnography enables the observation of online cultural practices, interactions, and platform-specific behaviors (Hine, 2015), while CDA provides analytical tools for examining how discourse, ideology, and power relations construct meanings and legitimacy within digital content (van Dijk, 1993; 2008). This methodological combination aligns with the study’s objective of conceptualizing halal as a socially produced and algorithmically mediated form of visibility rather than merely a legal or institutional category.

### Research Setting and Sample

The study was conducted within digital environments where street-food promotion, audience engagement, and algorithmic circulation occur. The research setting consisted of three major social media platforms Instagram, Facebook Reels, and YouTube which represent dominant spaces for food-related content production and consumption in Indonesia. A purposive sampling strategy was employed to identify information-rich cases capable of providing deep insights into halal representation and digital visibility. The selected accounts met four criteria: (1) consistent publication of street-food content, (2) active audience engagement, (3) visibility within local digital communities, and (4) relevance to halal-oriented culinary representation.

**Table 1. Research Setting, Sampling Strategy, and Units of Analysis**

Code	Platform	Featured Vendor	Content Type	Number of Contents	Selection Criteria
KY	Instagram	Jagung Bakar Mbah Mar’qiah	Reels & short videos	18	Consistent street-food content, active engagement
KB	Facebook Reels	Bakso Pak Suwaji	Short-form videos	12	Strong local visibility and community interaction
SL	Instagram	Sate Kere	Reels & photo posts	18	Traditional street-food representation and stable engagement
RW	YouTube	Ayam Pinang Favorit	Long-form food vlogs	18	Narrative-rich content and extensive audience interaction
Total	3 Platforms	4 Accounts	Multi-format Content	48 Contents	Purposive Sampling

Source: Authors’ compilation (2025)

The final corpus consisted of 48 digital contents collected from January to April 2024, enabling the study to capture diverse forms of halal representation across different platform environments.

### Data Collection

Data were collected between January and April 2024 using three complementary

techniques: virtual observation, multimodal documentation, and in-depth interviews. Virtual observation focused on posting patterns, engagement practices, audience interactions, hashtag usage, and platform-specific visibility mechanisms. Multimodal documentation involved systematically capturing textual, visual, and audio elements, including captions, hashtags, comments, screenshots, thumbnails, narrative structures, and visual compositions. In-depth semi-structured interviews were conducted with street-food vendors featured in the selected content to explore their perceptions of digital representation, visibility, and halal-related meanings. The resulting data corpus is summarized in Table 2.

**Table 2. Data Corpus and Sources**

Data Source	Unit of Analysis	Quantity	Purpose
Instagram Reels	Videos and captions	36 posts	Examine visual representation and engagement
Facebook Reels	Short-form videos	12 videos	Analyze platform-specific visibility
YouTube Vlogs	Long-form videos	18 videos (221 minutes)	Examine narrative construction
Captions, Hashtags, Metadata	Textual content	116 items	Analyze symbolic framing
Audience Comments	User interactions	1,284 comments	Explore audience interpretation
Visual Screenshots	Visual frames	90 images	Analyze visual grammar
In-depth Interviews	Street-food vendors	15 participants	Explore perceptions and experiences

Source: Authors' compilation (2025)

The integration of multiple sources of evidence strengthened data triangulation and enabled a comprehensive understanding of how halal visibility is produced and interpreted within digital environments.

### Analytical Constructs and Operationalization

In qualitative research, theoretical concepts are operationalized through analytical categories rather than statistical indicators. Guided by Lefebvre's Theory of the Production of Space, this study operationalized three analytical dimensions: spatial practices, representations of space, and representational spaces. In addition, van Dijk's CDA informed the analysis of discourse, narrative structures, and visual representations.

**Table 3. Analytical Constructs and Coding Framework**

Theoretical Dimension	Operational Definition	Coding Categories	Data Sources
Spatial Practices	Everyday activities through which halal is enacted	Food preparation, hygiene, vendor-consumer interaction	Videos, interviews
Representations of Space	Platform structures shaping visibility	Algorithms, content formats, captions, visual aesthetics	Videos, metadata
Representational Spaces	Audience interpretation and symbolic meanings	Trust, authenticity, legitimacy, engagement	Comments, interviews

Theoretical Dimension	Operational Definition	Coding Categories	Data Sources
Discursive Construction (CDA)	Meaning-making through discourse and representation	Narrative framing, lexical choices, religious references	Videos, captions
Algorithmic Visibility	Halal Public recognition of halal through digital circulation	Amplification, engagement, visibility patterns	Multi-source data

Source: Adapted from Lefebvre (1991) and van Dijk (1993; 2008)

These analytical dimensions provided a systematic framework for translating theoretical concepts into empirical observations and ensured consistency between the conceptual framework and empirical analysis.

### Data Analysis Technique

Data analysis followed an iterative process combining thematic analysis and Critical Discourse Analysis. First, all collected materials including videos, captions, comments, screenshots, and interview transcripts were subjected to open coding to identify recurring themes related to cleanliness, trust, halal representation, audience engagement, and platform visibility. Second, the identified codes were organized according to Lefebvre’s triadic dimensions. Third, CDA was applied to examine how discourse, visual representations, and narrative structures contributed to the construction of halal legitimacy within digitally mediated environments. The analysis focused on identifying ideological assumptions, symbolic meanings, and forms of algorithmic amplification embedded within digital content. To ensure trustworthiness, the study employed triangulation, prolonged digital immersion, peer debriefing, reflexive note-taking, and audit-trail documentation. The quality assurance procedures are summarized in Table 4.

**Table 4. Trustworthiness Procedures**

Quality Criteria	Validation Technique
Credibility	Triangulation across platforms, interviews, and comments
Dependability	Audit trail and systematic coding documentation
Confirmability	Reflexive notes and peer debriefing
Transferability	Thick description and contextual reporting
Authenticity	Four-month digital immersion

Source: Adapted from Kozinets (2020) and Markham (2020)

Together, these procedures enhanced the credibility, dependability, confirmability, and transferability of the findings while minimizing researcher bias and ensuring methodological rigor.

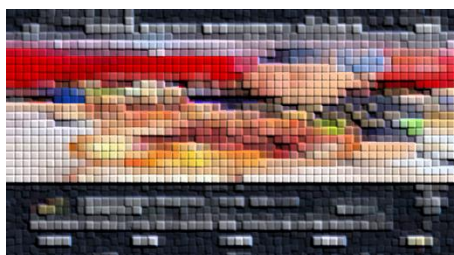
## RESULT

### Constructing Halal Trough Visual Cleanliness and Moral Trust

The findings reveal that halal in digital street-food spaces is rarely communicated through explicit certification or formal religious labels. Instead, halal is constructed through visible practices of cleanliness, food handling, and moral trust that audiences repeatedly interpret as indicators of food safety and ethical responsibility. This finding supports recent studies suggesting that halal perceptions increasingly extend beyond formal certification and involve broader

assessments of trust, quality, and credibility (Wilson & Liu, 2021; Fischer, 2021). Analysis of the KY Instagram account, which features *Jagung Bakar Mbah Mar'qiah*, demonstrates that visual attention is frequently directed toward food preparation processes. Several reels emphasize the washing of ingredients before cooking, the separation of cooking utensils, and the orderly arrangement of food preparation areas. Similar patterns were observed in the SL Instagram account, where close-up shots repeatedly highlight ingredient freshness and cooking procedures. These visual elements become recurring communicative cues through which audiences evaluate the trustworthiness of food vendors.

**Figure 1. Visual representation of food preparation and hygiene practices in KY Instagram content.**



*Source: Screenshot captured during virtual ethnography (January–April 2024).*

The visual composition shown in Figure 1 illustrates how cleanliness becomes an observable and communicative element within digital food content. Rather than explicitly referring to halal certification, the content foregrounds visible practices that may encourage audiences to associate food preparation with safety, responsibility, and trustworthiness. Previous studies have similarly shown that Muslim consumers frequently rely on visible indicators of hygiene and transparency when assessing halal authenticity in everyday consumption settings (Rohman & Abduh, 2023).

A comparable pattern was identified in the KB Facebook Reels account featuring *Bakso Pak Suwaji*. In several videos, the camera repeatedly focuses on boiling processes, organized food displays, and interactions between vendors and customers. The content does not explicitly mention halal status; however, visual emphasis on orderly food preparation creates a positive impression of credibility and food quality. Such representations correspond with broader findings that visual trust increasingly influences consumer evaluations in digital food cultures (Jamal & Sharifuddin, 2022).

**Figure 2. Organized cooking arrangements and visible hygiene practices in KB Facebook Reels content.**



Source: Screenshot captured during virtual ethnography (January–April 2024).

Audience responses further reinforced this pattern. Analysis of the collected comments indicates recurring references to cleanliness, safety, and trust. Viewers frequently used expressions such as:

*“kelihatan bersih banget, jadi yakin makan di sini”, “rapi dan higienis, enak dilihat”, “insyaAllah aman ini makanannya”. “bantu share dan like sebanyak-banyaknya ya”,* said KB

Although audiences rarely referred directly to halal certification, their comments demonstrate that visible cleanliness functions as an important basis for evaluating food legitimacy. This finding resonates with studies arguing that contemporary halal consumption increasingly incorporates experiential judgments and affective trust rather than relying exclusively on institutional verification (Izberk-Bilgin & Nakata, 2021). The relationship between visual cleanliness and halal trust was further evident in interview data. Vendors consistently acknowledged that digital visibility has transformed how consumers evaluate food businesses. One participant from the KY dataset explained:

*“Kalau ada yang mau merekam biasanya saya memang lebih teliti. Bukan karena mau pura-pura bersih, tapi karena videonya nanti bisa dilihat banyak orang. Kalau orang datang langsung mungkin cuma beberapa yang lihat, tapi kalau masuk media sosial kan banyak yang menilai. Saya tidak mau orang salah paham mengira tempat saya jorok atau tidak serius menjaga makanan.”*

Vendors' concern with displaying cleanliness was not solely directed toward consumers but also toward achieving greater digital visibility. The repeated recording of washing, cooking, and serving processes reflects an awareness that visually transparent content tends to perform better within platform circulation systems. Similarly, a vendor featured in the KB content noted:

*“Menurut saya orang sekarang memang lebih melihat dari tampilan dulu. Kalau kelihatannya bersih mereka langsung percaya. Padahal halal itu bukan cuma soal bersih. Tapi kalau tempat kelihatan kotor, orang biasanya langsung ragu. Jadi saya merasa harus*

*menunjukkan bahwa kami memang menjaga prosesnya dengan baik.”*

These narratives reveal an important tension in the construction of halal visibility. Vendors recognize that halal encompasses broader religious principles; however, they also understand that audiences increasingly rely on visual observation when making judgments about food trustworthiness. Similar forms of negotiated trust have been identified in studies of digital religion and halal consumer culture, where credibility is often established through everyday performances rather than formal institutional authority alone (Campbell & Tsuria, 2021; Fischer, 2021).

Evidence from the RW YouTube account further strengthens this pattern. Unlike the shorter content found on Instagram and Facebook, RW’s long-form videos provide extended visual access to food preparation activities. Several videos include detailed sequences showing ingredient selection, cooking processes, and interactions between vendors and customers. Such narrative structures enable viewers to observe production processes directly, thereby reinforcing perceptions of transparency and authenticity. Research on food-vlogging cultures similarly suggests that extended visual exposure contributes to audience perceptions of trust and credibility by creating a sense of proximity to production practices (Abidin, 2023).

**Figure 3. Extended visual documentation of food preparation processes in RW YouTube content.**



*Source: Screenshot captured during virtual ethnography (January–April 2024).*

The findings indicate that audiences do not evaluate halal solely through formal institutional mechanisms. Instead, trust emerges through a combination of visual observation, repeated interaction, and shared moral interpretations. Across the dataset, cleanliness, transparency, and orderly food preparation consistently function as signs through which viewers assess whether food appears trustworthy and acceptable. Such findings support growing scholarship that conceptualizes halal not merely as a legal category but also as a socially negotiated moral framework embedded within everyday practices of consumption and exchange (Ali et al., 2023; Fischer, 2021).

Rather than functioning merely as an indicator of hygiene, visual cleanliness operates as a substitute sign through which halal becomes publicly recognizable in digital environments. Across Instagram, Facebook Reels, and YouTube, audiences rarely encountered direct references to halal certification, religious authority, or formal verification procedures. Instead, they relied on observable cues such as ingredient washing, organized cooking arrangements, clean utensils, and transparent preparation processes. These visual markers enabled viewers to infer halal legitimacy without requiring explicit religious claims. Consequently, halal was not communicated primarily through doctrinal language but through a visual grammar of trust that translated religious

legitimacy into observable everyday practices.

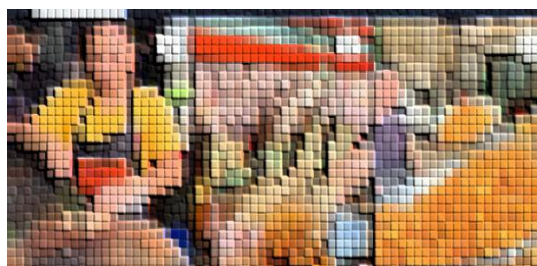
In this context, halal operates as a form of moral trust embedded within everyday economic practices. Through the interaction of vendors, content creators, and audiences, visual cleanliness becomes a socially recognized marker of legitimacy. More importantly, these findings suggest that halal recognition increasingly depends upon mediated visibility. Rather than being established solely through certification, halal trust is co-produced through digital representations, audience evaluations, and platform-based circulation. This finding extends existing discussions of halal consumption by demonstrating how moral trust is visually constructed and publicly negotiated within contemporary digital street-food spaces.

### **Performing Halal Through Narratives and Aesthetic Representation**

The findings indicate that the visibility of halal-oriented street-food content is not determined solely by food quality or religious credibility. Rather, visibility emerges through continuous adaptation to platform-specific algorithmic preferences that reward particular forms of visual presentation. Across Instagram, Facebook Reels, and YouTube, food vloggers consistently employed similar visual techniques, including close-up shots of food textures, rapid editing sequences, repetitive cooking scenes, and visually appealing serving moments. These recurring patterns suggest the emergence of an aesthetic standard through which food content becomes more likely to circulate within platform environments.

Analysis of the KY and SL Instagram accounts revealed a strong tendency toward short-form videos emphasizing visually attractive moments during food preparation. Scenes featuring smoke rising from grilled food, the pouring of sauces, ingredient mixing, and customer reactions appeared repeatedly across multiple uploads. Although these visual elements may appear spontaneous, their repetition indicates a deliberate effort to produce content that aligns with audience expectations and platform visibility mechanisms. Previous studies similarly demonstrate that social media creators increasingly adapt their content strategies according to perceived algorithmic preferences, resulting in the standardization of visual forms across digital platforms (Bishop, 2021; Cotter, 2019).

**Figure 4. Repetitive visual patterns in Instagram Reels emphasizing food textures and preparation processes.**



*Source: Screenshot captured during virtual ethnography (January–April 2024).*

A comparable pattern emerged within the KB Facebook Reels account. Content creators

frequently selected scenes involving dramatic food preparation, large serving portions, and emotionally engaging interactions between vendors and customers. Videos often opened with attention-grabbing visual sequences before introducing information about the food itself. Such arrangements reflect broader platform dynamics in which visibility is increasingly associated with the ability to capture audience attention within the first few seconds of viewing (Kaye et al., 2022). Consequently, food representation becomes shaped not only by cultural or religious considerations but also by the technical requirements of platform circulation.

Audience engagement data further reinforce this pattern. Posts receiving higher numbers of likes, shares, and comments generally contained stronger visual stimulation, faster editing rhythms, and more emotionally appealing narratives. Comments frequently focused on visual attractiveness rather than on product attributes alone. Viewers commonly wrote: *“videonya bikin lapar”*, *“cara ngambil gambarnya keren”*, *“lihat asapnya langsung pengen beli”*, and *“editingnya bikin makanan kelihatan lebih enak”*. Such responses indicate that audience engagement is influenced not merely by the food itself but also by how food is aesthetically presented within digital environments.

Interview data reveal that content creators are highly aware of these visibility dynamics. One participant associated with the KY account explained:

*“Kalau videonya terlalu biasa biasanya tidak banyak yang menonton. Jadi kami mencoba mengambil gambar yang lebih dekat, memperlihatkan proses masak yang menarik, atau memilih bagian yang paling menggugah selera. Kadang makanan yang sama bisa dibuat beberapa versi video karena kami melihat mana yang lebih banyak ditonton.”*

Similarly, a creator featured in the SL dataset noted:

*“Sekarang orang menonton sangat cepat. Kalau tiga detik pertama tidak menarik biasanya langsung lewat. Karena itu saya lebih fokus pada visual yang bisa membuat orang berhenti scrolling dulu. Setelah itu baru mereka memperhatikan isi videonya.”*

These narratives suggest that creators increasingly internalize platform logics when producing food content. Decisions regarding camera angles, editing styles, and narrative sequencing are shaped not only by creative preferences but also by expectations concerning algorithmic distribution. Similar findings have been reported in studies of platform labor, where creators continuously modify their practices in response to changing visibility metrics and engagement indicators (Duffy et al., 2021; Poell et al., 2022).

Evidence from the RW YouTube account demonstrates that algorithmic adaptation also occurs in long-form content. Videos often employ thumbnail designs featuring exaggerated facial expressions, highly saturated food images, and provocative titles intended to attract viewer attention. Within the videos themselves, introductory segments are structured to create anticipation before presenting detailed food reviews. These strategies correspond with broader observations that creators actively optimize content according to platform recommendation systems and audience retention metrics (Abidin, 2023; Cunningham & Craig, 2021).

*“Saya biasanya memilih tempat yang punya cerita. Kalau cuma makanan enak banyak. Tapi yang menarik itu ketika ada nilai yang bisa ditunjukkan, misalnya ketekunan*

*penjualnya, cara mereka menjaga kualitas, atau bagaimana mereka mempertahankan cara memasak yang sudah lama.”, said RW.*

The findings therefore suggest that halal street-food content increasingly operates within a shared aesthetic framework shaped by platform visibility regimes. Across different creators and platforms, similar visual conventions become repeatedly reproduced because they are perceived to generate greater audience engagement. As a result, representations of halal food become progressively standardized through algorithmically mediated practices of content production.

From the perspective of digital space production, this process extends beyond individual content strategies. Algorithmic systems indirectly influence which representations become visible, attractive, and socially recognizable. Visibility is therefore unevenly distributed, favoring creators who possess the technical knowledge, visual skills, and digital resources necessary to align with dominant platform aesthetics. Vendors and creators who cannot perform these aesthetic expectations may remain less visible regardless of the quality or authenticity of their products. In this sense, algorithmic visibility functions not merely as a mechanism of content distribution but as a form of cultural selection that shapes how halal street-food spaces are produced, experienced, and recognized within contemporary digital environments.

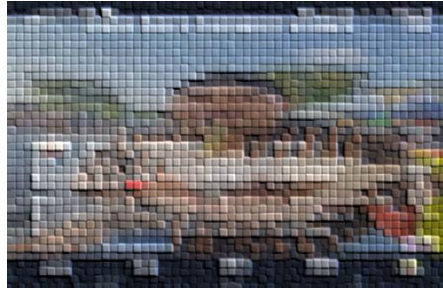
### **Algorithmic Aesthetics and the Unequal Visibility of Halal**

The findings reveal that the visibility of halal-related street-food content is unevenly distributed across digital platforms. While many vendors employ similar halal-oriented practices and moral representations, only certain forms of content achieve sustained public visibility. Analysis of Instagram, Facebook Reels, and YouTube indicates that platform algorithms systematically favor specific visual and narrative formats, including short-form videos, high-engagement storytelling, emotionally resonant scenes, and visually optimized food imagery. Consequently, the public visibility of halal is shaped not merely by religious meaning or food quality but by the capacity of content to conform to platform-specific visibility regimes.

Rather than determining whether content is halal, algorithmic systems influence which representations of halal become more visible, more widely circulated, and more frequently encountered by audiences. This process creates an uneven landscape of visibility in which some vendors receive substantial exposure while others remain relatively invisible despite offering similar products and adhering to comparable halal practices.

Analysis of the KY, KB, SL, and RW datasets demonstrates that Islamic moral visibility is embedded within both verbal narratives and visual performances. Across multiple videos, creators incorporate expressions and representations such as:

**Figure 5. Expressions of gratitude such as “Alhamdulillah” following successful sales or increased customer patronage.**



*Source: Screenshot captured during virtual ethnography (January–April 2024).*

One example of a recurring expression found in the content is:

*“Alhamdulillah, today's food was completely sold out before Maghrib. We are grateful for the blessings and support we received today. May this halal livelihood continue to bring benefit and barakah to many people.”*

The content demonstrates how Islamic expressions are incorporated into everyday food-promotion narratives. Although such expressions are not direct indicators of halal certification, they function as recognizable moral cues that resonate with Muslim audiences. When embedded within visually engaging short-form videos, these expressions become highly shareable and more likely to circulate across platform ecosystems.

**Figure 6. Visual representations of modesty and ethical conduct that contribute to the visibility of halal authenticity in digital street-food spaces.**



*Source: Screenshot captured during virtual ethnography (January–April 2024).*

The image illustrates how modest appearance and courteous customer service are incorporated into visually engaging food content. Such representations function as Islamic moral cues that may enhance audience engagement and contribute to the broader visibility of halal authenticity across digital platforms.

**Figure 7. Representations of simplicity, hard work, and grassroots livelihoods in digital street-food content.**



*Source: Screenshot captured during virtual ethnography (January–April 2024).*

The image depicts street-food production as a form of everyday labor rooted in simplicity, perseverance, and collective effort. Such representations evoke broader Islamic values concerning honest work, lawful earnings, and gratitude for sustenance. By presenting food vendors as hardworking individuals striving to earn a halal livelihood, the content generates emotional resonance while enhancing the public visibility of halal-oriented food practices.

## **DISCUSS**

### **From Halal Certification to Halal Visibility**

The findings suggest that halal in digitally mediated food environments cannot be understood solely through the conventional framework of certification and regulatory compliance. Existing halal scholarship has predominantly conceptualized halal as a legal and institutional category verified through religious authorities, certification systems, and market governance mechanisms (Jafari & Süerdem, 2022; Ali et al., 2023; Lever & Miele, 2023). While these perspectives remain important, the present findings demonstrate that audiences frequently evaluate halal through visible indicators such as cleanliness, transparency, ethical conduct, and food preparation practices rather than relying exclusively on formal certification.

This finding supports Fischer's (2021, 2022) argument that halal increasingly operates as a moral economy embedded in trust, ethics, and social responsibility. It also aligns with Wilson and Liu (2022), who argue that consumer perceptions of halal are influenced not only by certification but also by symbolic cues and affective trust. However, this study extends previous research by demonstrating that such trust is increasingly mediated through digital visibility. Within social media environments, halal becomes publicly recognizable through visual performances, audience interactions, and algorithmically amplified representations. Consequently, halal shifts from being solely an institutional category to becoming a communicative and socially negotiated form of legitimacy. This transformation reflects broader developments in digital religion, where religious meanings are increasingly constructed through mediated interaction rather than exclusively through institutional authority (Campbell & Evolvi, 2023; Hoover & Echchaibi, 2022).

### **Producing Digital Halal Space: Extending Lefebvre's Theory**

The findings strongly support Lefebvre's proposition that space is socially produced through the interaction of practices, representations, and lived experiences (Lefebvre, 1991). In

digital street-food environments, halal emerges through the interaction between vendors, content creators, audiences, and platform infrastructures. Everyday activities such as cooking, food preparation, filming, editing, commenting, and sharing constitute forms of spatial practice through which halal is enacted and experienced. These practices are subsequently transformed into representations of space through platform-specific formats, captions, visual arrangements, and narrative structures that organize the communication of halal-related meanings.

At the same time, halal acquires symbolic significance within representational spaces where notions of trust, honesty, modesty, ethical labor, and religious responsibility become attached to specific visual and narrative forms. This finding resonates with Meyer's (2021) argument that religious meanings emerge through processes of mediation and public recognition rather than through doctrinal classifications alone. Similarly, digital religion scholars have emphasized that contemporary religious identities and values are increasingly embedded in everyday media practices and participatory cultures (Campbell & Evolvi, 2020; Tsuria, 2022).

However, the present findings also reveal limitations within Lefebvre's original framework. While Lefebvre conceptualized space as socially produced, his theory was developed before the emergence of algorithmic platforms that now structure contemporary forms of visibility. The findings suggest that digital halal space is not merely socially produced but simultaneously socially and algorithmically produced. Platform architectures influence which representations gain visibility, engagement, and public recognition, thereby extending the processes through which space is produced in contemporary digital environments.

### **Algorithmic Mediation and the Construction of Religious Legitimacy**

A central contribution of this study lies in demonstrating how algorithmic systems mediate the construction of religious legitimacy. Existing platform studies have consistently shown that visibility within digital environments is governed by recommendation systems, engagement metrics, and algorithmic curation that privilege certain forms of content over others (van Dijck et al., 2018; Bishop, 2021; Couldry & Hepp, 2020; Poell et al., 2022). Nevertheless, little research has examined how these mechanisms influence the public recognition of religious values.

The findings indicate that algorithmic systems do not determine whether food is halal in a theological sense. Rather, they influence which representations of halal become visible, circulated, and repeatedly encountered by audiences. Content emphasizing cleanliness, transparency, gratitude, ethical labor, and Islamic moral cues tends to generate stronger audience engagement and therefore receives greater algorithmic amplification. This observation supports Kaye et al. (2022), who argue that platform visibility increasingly depends on engagement-oriented content formats and emotional resonance.

More importantly, the findings suggest that algorithmic systems indirectly participate in the production of religious legitimacy by shaping what audiences repeatedly encounter and recognize as trustworthy. This argument extends platformization theory by demonstrating that platform infrastructures influence not only cultural visibility but also the circulation of religiously meaningful representations (Couldry & Mejias, 2019; Fuchs, 2021). In this sense, digital platforms function not merely as communication channels but as socio-technical actors that shape the conditions under which religious meanings become publicly recognizable.

### **The Emergence of Algorithmic Halal Visibility**

Building upon these findings, this study introduces the concept of *algorithmic halal visibility*. The concept refers to the process through which halal becomes publicly recognizable through the interaction of everyday moral practices, visual representation, audience engagement, and algorithmic amplification. Unlike conventional halal frameworks that locate legitimacy primarily within institutional certification systems (Ali et al., 2023; Jafari & Süerdem, 2022), algorithmic halal visibility highlights the role of digital infrastructures in shaping contemporary forms of religious recognition.

The concept also extends existing discussions in digital religion and platform studies. Previous research has demonstrated that visibility within digital environments is structured through platform logics, algorithmic recommendation systems, and engagement metrics (Bishop, 2021; Poell et al., 2022). Meanwhile, digital religion scholarship has emphasized the growing role of media technologies in shaping religious communication and authority (Campbell & Evolvi, 2023; Hoover & Echchaibi, 2022). By integrating these perspectives, this study argues that halal legitimacy increasingly operates within visibility regimes governed by both social interaction and algorithmic mediation.

Consequently, halal visibility emerges not merely from religious authority but from the continuous interaction among everyday practices, symbolic representations, audience interpretation, and platform infrastructures. This conceptualization shifts analytical attention from halal as a regulatory category toward halal as a digitally mediated visibility regime, thereby offering a new perspective for understanding religious legitimacy in contemporary digital societies.

### **Toward a Framework of Digital Religious Legitimacy**

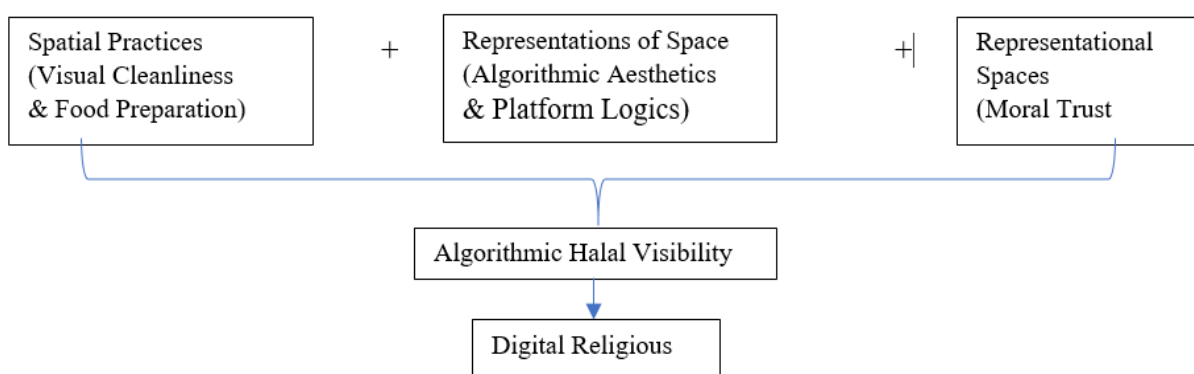
The broader implication of this study concerns the transformation of religious legitimacy in platform societies. Traditionally, legitimacy has been associated with institutional authority, religious expertise, and formal certification systems (Fischer, 2022; Lever & Miele, 2023). However, the findings suggest that these sources of legitimacy increasingly coexist with new forms of mediated recognition structured by digital infrastructures. Consequently, religious legitimacy is no longer produced exclusively through institutional validation but emerges through the interaction of social actors, symbolic representations, and platform-mediated visibility.

As illustrated in Figure 8, digital religious legitimacy emerges through a dynamic process involving three interrelated dimensions derived from Lefebvre's theory of the production of space. First, spatial practices refer to everyday activities through which halal is enacted, including food preparation, hygiene practices, ethical labor, and vendor–consumer interactions. These practices constitute the material foundation upon which halal meanings are produced and experienced. Second, representations of space refer to platform structures and algorithmic logics that organize visibility through content formats, visual aesthetics, recommendation systems, and engagement metrics. Third, representational spaces capture the symbolic meanings and moral interpretations constructed by audiences through comments, engagement, trust formation, and collective recognition.

The interaction among these three dimensions generates what this study conceptualizes as algorithmic halal visibility. Rather than emerging solely from religious certification, halal

becomes publicly recognizable through the combination of moral performance, visual representation, audience engagement, and algorithmic amplification. In this process, platform infrastructures selectively enhance the visibility of certain representations, allowing specific forms of halal expression to gain broader recognition and credibility.

**Figure 8. Conceptual Framework of Algorithmic Halal Visibility and Digital Religious Legitimacy**



*Source : Authors' conceptualization based on empirical findings (2025).*

Figure 8 demonstrates that halal visibility is not merely a consequence of religious authority or institutional certification. Instead, it emerges through the continuous interaction between everyday practices, symbolic representations, audience participation, and algorithmic infrastructures. This framework therefore extends Lefebvre's original model by incorporating platform architectures as active mediators of visibility and recognition. The concept of algorithmic halal visibility contributes to halal studies, digital religion, and platform studies by explaining how religious legitimacy is increasingly negotiated within algorithmically mediated environments.

Beyond the context of halal street-food promotion, this framework offers broader theoretical implications for understanding the platformization of religion, digital moral economies, and contemporary forms of mediated religious recognition (Campbell & Evolvi, 2023; Tsuria, 2022; Couldry & Hepp, 2020; Poell et al., 2022). It suggests that visibility itself has become a significant mechanism through which religious meanings acquire credibility, trust, and public legitimacy in contemporary digital societies.

## CONCLUSION

This study demonstrates that halal in digitally mediated street-food environments operates not merely as a religious or regulatory category but as a socially produced form of visibility shaped through the interaction of everyday practices, symbolic representations, audience engagement, and platform infrastructures. Drawing on Lefebvre's theory of the production of space and Critical Discourse Analysis, the findings reveal that halal is constructed through three interconnected dimensions: spatial practices, representations of space, and representational spaces. Within this process, visual cleanliness, ethical labor, transparency, and

Islamic moral cues function as communicative resources through which halal becomes publicly recognizable and socially trusted. More importantly, the study shows that platform algorithms and visibility mechanisms influence which representations of halal gain wider circulation and recognition. Based on these findings, the study introduces the concept of algorithmic halal visibility, highlighting how religious legitimacy is increasingly negotiated through digitally mediated visibility regimes rather than relying solely on institutional certification and religious authority.

The study contributes theoretically by extending Lefebvre's spatial framework into platformized environments and by bridging halal studies, digital religion, and platform studies through a new conceptual understanding of digitally mediated religious legitimacy. Empirically, it provides evidence from informal economic actors street-food vendors whose role has received limited attention in existing scholarship. Practically, the findings offer insights for content creators, small-scale food entrepreneurs, and policymakers regarding the growing importance of digital visibility in shaping public trust and perceptions of halal. Nevertheless, this study has several limitations. The analysis focuses on a limited number of social media accounts and platforms within the Indonesian context, which may not capture the diversity of halal representations across different cultural and technological settings. In addition, the study examines algorithmic visibility through observable platform practices and audience engagement rather than through direct access to platform algorithms. Future research could employ comparative cross-country designs, incorporate platform analytics, or investigate other forms of digitally mediated religious consumption to further develop the concept of algorithmic halal visibility and its implications for contemporary religious publics.

#### **AUTHOR CONTRIBUTIONS**

Conceptualization, D.H. and R.I.; methodology, D.H.; software, D.H.; validation, D.H., Y.W.I.S., and S.; formal analysis, D.H. and R.I.; investigation, D.H. and R.I.; resources, D.H.; data curation, D.H.; writing—original draft preparation, D.H.; writing—review and editing, Y.W.I.S. and S.; visualization, D.H.; supervision, Y.W.I.S. and S.; project administration, D.H.; funding acquisition, not applicable. All authors have read and agreed to the published version of the manuscript.

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#### **INSTITUTIONAL REVIEW BOARD STATEMENT**

Ethical review and approval were waived for this study because the research primarily involved the analysis of publicly accessible digital content available on social media platforms (Instagram, Facebook Reels, and YouTube) and did not involve clinical interventions, vulnerable populations, or sensitive personal data. Interviews with participating street-food vendors were conducted voluntarily, and participants were informed about the purpose of the study and the use of the data for academic research purposes.

### **INFORMED CONSENT STATEMENT**

Informed consent was obtained from all subjects involved in the study.

### **DECLARATION OF GENERATIVE AI AND AI-ASSISTED TECHNOLOGIES IN THE WRITING PROCESS**

During the preparation of this work, the authors used ChatGPT (OpenAI) to assist with language refinement, grammar checking, academic writing improvement, and manuscript organization. After using this tool, the authors carefully reviewed, edited, and validated all content and take full responsibility for the content of this publication.

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### **CONFLICTS OF INTEREST**

The authors declare no conflicts of interest.

The authors further declare that the funders had no role in the design of the study; in the collection, analysis, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

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