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Seeing through transparency in the craft chocolate industry: The what, how, and why of cacao sourcing

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ABSTRACT

Transparency is a defining feature of the craft chocolate industry, but with the lack of benchmarks or regulations for this budding industry, entrepreneurs and stakeholders interpret and apply transparency in different ways. In general, transparency appears to be motivated by the aim to improve environmental and social outcomes in cacao origins, but with a lack of rigorous scientific evidence attributing transparency to such outcomes, the extent to which society benefits from industry transparency remains unclear. We provide a first step towards understanding the potential impact of transparency by studying how craft chocolate makers define the concept. Specifically, we ask what information is being disclosed, by whom, how, and why. Our practice-based research methods include collaboration with a key actor in the craft chocolate community: The Chocolate Alliance, an industry platform based in the United States. We employed an iterative mixed-methods approach by engaging 67 research participants in a survey and 13 in semi-structured interviews. Our study indicates that while ethical cacao sourcing is a significant motivator for transparency, craft chocolate makers were also driven by product quality and supply chain objectives. Notably, makers prioritized sharing information they believe will resonate with consumers and encourage purchase, challenging the notion that these companies are wholly driven by non-market goals.

1. A global craft: Introducing transparency in craft chocolate

Global food supply chains are often associated with negative environmental and social impacts in distant 'geographies of production' within the Global South. Chocolate exemplifies the complexity of sourcing ethical food products that are intrinsically global in nature due to disparate geographies of production and consumption [1,2]. Cacao, the main ingredient in chocolate, is a climate-sensitive tree crop that can only be grown in tropical ecosystems close to the equator [3]. Cacao has been described as a "tropical forest risk commodity," which typifies the situation where cacao production is a main driver of deforestation in tropical rainforests, leading to significant biodiversity loss, carbon emissions, and microclimate change through irregular climate cycles [4–7]. Additionally, commodity cacao production is associated with labor exploitation, human rights violations, and Indigenous rights infractions [8–10]. Despite most cacao production taking place in geographies that are generally typified as part of the Global South, the majority of chocolate consumption occurs in the Global North, where consumers are increasingly demanding more information about the impacts of their purchases [11]. While the chocolate industry has responded to this call for ethical cacao sourcing and greater supply chain transparency through the creation of myriad sustainability programs, the impact of these efforts remains unclear [12,13].

Partly due to frustration with the pervasive environmental and social costs associated with sourcing cacao through commodity (or bulk) supply chains, an alternative cacao sourcing strategy has emerged and with it an entirely new form of chocolate production: craft chocolate, also known as specialty, artisan, or bean-to-bar chocolate. Craft chocolate is now an industry of its own, based around the "small-scale production of superior chocolate products using fine flavor or specialty cacao beans" [11], p.1]. Notably, the craft chocolate industry is based on a 'values-driven' business model that has been described as distinct from commodity chocolate [14,15]. Most craft chocolate companies are small businesses that value supply chain transparency [2]. These companies pride themselves on either sourcing directly from farmers with whom they have personal relationships (direct trade), or from specialty cacao traders (i.e., value chain actors who specialize in sourcing high quality cacao). Specialty cacao traders' business models are often based on

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supply chain transparency, using information disclosure to differentiate themselves from competitors. While a very small number do already disclose cost distribution and profit sharing, there is increasing pressure to provide transparency along the entire supply chain [2,14,15].

As consumers have become more aware of the negative impacts of commodity cocoa production, cacao origin transparency is often employed in the craft chocolate industry as a marketing strategy to communicate credence attributes that distinguish craft from commodity [16–18].[1] Craft chocolate consumers are willing to pay more for chocolate, but have high expectations for quality, ethics, and sustainability [17,19]. The craft chocolate industry therefore offers higher price premiums, claiming to supply cacao farmers with higher prices and more resources than conventional cacao supply chains, prioritizing environmental resource conservation and farmer welfare [2]. Compared to commodity chocolate, transparency has been a signature differentiation strategy for the craft chocolate industry as businesses disclose an unprecedented level of information about their business practices, commitments, and direct transactions [15]. Although the global market share of craft chocolate and speciality cacao remains small overall, using only 4% of total global cocoa production, the industry has more than doubled in size since 2017 and continues to expand [20].

Existing definitions of transparency in the craft chocolate industry mainly pertain to cacao origin disclosure: "where Traceability is the map of cocoa's physical journey from farmer to end product, Transparency is the willingness to share the map" [21]. In this study, we expand upon these definitions by adopting a theoretical framework for supply chain transparency that includes six distinct components: 1) traceability information, 2) transaction information, 3) impact information, 4) policy and commitment information, 5) activity information, and 6) effectiveness information [1]. With the overarching research goal of determining why and how craft chocolate companies employ consumer-facing transparency, we ask the following research questions:

1. What information are craft chocolate companies being transparent about with consumers?
2. How is this information being communicated?
3. What are the motivations for businesses to share information at different levels of transparency?
4. What do craft chocolate businesses perceive as barriers to transparency within the craft chocolate industry?

Our research is motivated by the hypothesis that the craft chocolate industry is composed of 'innovator' companies that might inspire change in the entire chocolate industry [2,11,15]. By exploring the nuances of supply chain transparency within the craft chocolate industry, we aim to create knowledge that can be useful for improving future transparency practices, as well as help to identify priority areas for investment and public policy.

2. Material and methods

We employed an iterative, mixed-methods approach by combining a survey with semi-structured interviews. Mixed-methods research can improve the validity of results by allowing for data triangulation [22, 23]. While participant recruitment was targeted primarily at craft chocolate makers, we invited other industry stakeholders to participate in the study. We applied a practice-based approach to our research design, which entails collaboration between academic and non-academic research partners to co-generate knowledge informed by practical action [24,25]. We co-created the research agenda, scope, and design of this study in partnership with Chocolate Alliance, an organization that provides business education for the craft chocolate industry [26]. Collaboration with a community partner allowed us to focus our research on what is most valuable for the craft chocolate industry [25]. Our practice-based approach resulted in a Trends Report on Origin Transparency that was widely circulated in the industry and presented at the 2022 Northwest Chocolate Festival [27]. This research project received approval from the University of Victoria Ethics Board (application number #21-0350).

2.1. Survey design

We designed our survey collaboratively with Chocolate Alliance with the aim to develop questions that were relevant and easily understood by the craft chocolate community. Our goal was to better understand the transparency practices and perspectives currently in place by craft chocolate industry professionals. After generating approximately 40 questions and consulting with an external chocolate researcher experienced in survey methodologies, we finalized a 28-question online survey with a completion time of approximately 15 min [Chang, 2022, personal communication], [28]. Our survey asked participants about their consumer-facing transparency practices and collected demographic information including a) role in the craft chocolate industry, b) number of employees, c) primary regions of operation, and d) date of establishment (see Appendix B). Participants were also asked about their knowledge of the origins of their cacao, which was followed by questions about the types of information they communicate to consumers, and how they share that information. Answer options were not intended to be exhaustive, but instead were designed to gauge broad trends and guide interview development. Additionally, certain questions allowed for the selection of multiple options where it was likely that respondents might need to select several relevant attributes. Chocolate Alliance facilitated the distribution of the survey throughout their professional network of over 2,500 self-identified members of the craft chocolate industry. Survey responses were anonymous unless participants chose to self-identify and participate in a follow-up interview. A total of 79 surveys were collected between December 2021 and February 2022. Twelve were removed for lack of completeness, resulting in a final sample of 67.

2.2. Interview design

We conducted semi-structured interviews using an interview guide (see Appendix C). Interviews were personalized based on participants' survey responses, and our semi-structured approach provided flexibility for questions to emerge naturally so that the exact topics discussed were relevant to each individual participant [29,30]. In total, 13 interviews were conducted with the following industry actors: 10 chocolate makers, one re-melt chocolatier, one cacao importer, and one value chain specialist with experience working at origin.

Interviews were transcribed and analyzed using Taguette, a qualitative data analysis software that allows for multiple simultaneous users [31]. A coding scheme that included 32 different codes was developed and the data was coded by multiple team members to ensure inter-coder reliability [29]. After transcripts were coded, a summary and analysis of important findings from each code was written and subsequently analyzed alongside the survey data. Interview participants are represented by the first letter of their role—maker (M), re-melt chocolatier (R), importer (I), and value-chain specialist (V)—followed by a sequential number. Survey respondents and interview participants were self-selected, which poses an important limitation in that our data is biased towards companies supporting transparency and engaging in higher levels of transparency practices.

2.3. Data validation

Beyond a mixed-methods approach, data triangulation to validate

[1] Credence attributes can be understood as quality characteristics of products that cannot be evaluated by consumers without additional contextual information, such as certification labels [18].

findings also included attending six webinars to learn about current needs and areas of interest within the craft chocolate industry.[2] We compared knowledge shared in these sessions to our findings, further triangulating our data to determine where it aligned with—and diverged from—the understandings of the broader craft chocolate industry.

We presented preliminary findings at the 2022 Northwest Chocolate Festival (NWCF), North America's largest craft chocolate trade show and conference [32,33]. We held two separate presentations, one at the Chocolate UnConference, an industry-focused business development conference connected to NWCF, and another during the trade show itself. This allowed our research to reach a wide audience including craft chocolate makers, consumers, retailers, and speciality cacao importers. The research team used these sessions, and the feedback we received, to check for the accuracy and resonance of our findings within the wider craft chocolate community.

3. Supply chain transparency: moving from theory to practice

The call for transparency in global supply chains represents a burgeoning global norm to hold corporations accountable for the harms embedded in their supply chains in foreign jurisdictions [34,35]. This is especially relevant in the Global South's geographies of production as these areas are especially vulnerable to labor exploitation and environmental degradation [34,35]. As standards of foreign corporate accountability evolve, supply chain actors increasingly employ consumer-facing supply chain transparency to communicate their business ethics. However, the environmental governance literature has long recognized the risk of employing transparency as a solution in and of itself [36]. Scholars emphasize that transparency is a tool to achieve another aim. That aim is generally accountability, or the ability to hold actors responsible for the harm they cause to people and ecosystems [37]. Transparency is critical for verifying the effectiveness or impacts of sustainability measures [38]. However, the literature is often critical of stand-alone transparency measures, explaining how the impacts of transparency initiatives often remain limited and, in some cases, distracts from the actual issues at hand [1,37].

Existing literature on supply chain transparency is largely focused on conventional (bulk) cocoa [12,39]. This discrepancy may reflect the longer history that conventional cocoa trade has had with public demands for corporate accountability, which has spurred the call for disclosure of information surrounding sustainability initiatives [13,36,40,41]. The recent growth in demand for craft chocolate may have outpaced the development of sector-specific tools and standards to support transparency communication in specialty cacao supply chains [14].[3] As such, the relative advancement of transparency conventions in the bulk sector provides an opportunity for sharing lessons across each end of the cacao supply spectrum (small-scale specialty cacao on one side, and large-scale bulk cacao on the other). We therefore adapted Gardner et al.'s (2019) framework which defines and outlines transparency for large-scale agrifood supply chains [1]. This framework outlines six categories of information transparency that must be considered when using transparency as a tool to achieve sustainability outcomes in global supply chains: traceability, transaction, impact, policy and commitment, activity, and effectiveness (Fig. 1.). Ultimately, this framework provides a holistic view of transparency and has the potential to contribute to current definitions put forth within the craft chocolate community, such as the Fine Chocolate Industry Association (FCIA) Fine Chocolate Glossary [21].

We drew from Gardner et al.'s [1] framework in conjunction with our practice-based approach, using the six information transparency categories as a means of guiding our collaboration with Chocolate Alliance. Combining theory and practical knowledge enabled our ability to translate main themes from this broader understanding of supply chain transparency into the language and trends of the craft chocolate industry. As such, we adapted this framework to reflect the unique nature of craft cacao supply chains and how craft chocolate makers engage with them. This allowed us to identify gaps in the information currently being communicated in the craft chocolate industry. Ultimately, our dialectical approach combining theory with practice allowed us to identify which aspects of information transparency are currently being engaged with in craft chocolate, and why they are valued [1].

4. Results

4.1. Survey demographics

Participants were asked to provide demographic information including a) role in the craft chocolate industry, b) number of employees, c) primary regions of operation, and d) date of establishment. Most survey respondents were craft chocolate makers (69%), with the remaining 31% comprised of confectioners (10%), re-melt chocolatiers (9%), and 'other' actors in the craft chocolate industry (12%). Most survey respondents were connected to small businesses with ≤5 employees (55%). An additional 39% of companies had between 6 and 25 employees, while only 6% of companies had ≥26 employees. Business size data aligns with previous demographic information collected from the craft chocolate industry which indicates that the industry is primarily comprised of small businesses [15]. Survey respondents' primary business locations were predominantly in North America (64%). The remaining respondents' primary business locations included Central America (9%), South America (9%), Asia and the Pacific (7%), "other" (6%), Europe (3%), and Africa (1%). Geographic regions in the "other" category included the Caribbean and Polynesia. In terms of date of business establishment, most companies surveyed were founded between 2014 and 2017 (46%); 27% were established before 2009; 16% were established between 2018 and 2021; and 10% of business establishment occurred between 2009 and 2013.

4.2. What information are craft chocolate companies sharing?

Craft chocolate companies share three key categories of information concerning transparency: traceability information, transaction information, and impact information. Traceability information—including both the geographic location where the cacao is grown (cacao origin) and the circumstances under which it was grown (the relationship between the farmer and the maker)—was most frequently shared with consumers. In contrast, transaction information—such as cacao price and trade relationship—was shared less frequently. Most participants also shared information about their ecological and social impact with consumers primarily by communicating environmental sustainability and social development projects at origin. Notably, interview participants problematized the complex nature of using cacao sourcing to resolve ecological and social issues at origin.

4.2.1. Cacao origin

Nearly all survey respondents share some aspect of cacao origin

[2] Presentations included FCIA 2021 Business Survey Results (2022), Chocolate Alliance Research Partnership Presentation (2022), Myth Busting African Cocoa & Chocolate (2022), FCIA Cocoa Ecosystem Report: The Common Language of Fine Chocolate (2022), The Common Language of Fine Chocolate' at the Cacao & Chocolate Summit (2022), and CHOCOA (2022).

[3] The craft chocolate industry has several names for its finished products, including 'artisan' and 'bean-to-bar' chocolate. For the sake of clarity, we are using 'craft chocolate' to refer to finished chocolate bars. The main ingredient in these craft bars is 'specialty' cacao to distinguish these higher quality ingredients from commodity/conventional cacao or cocoa [21].

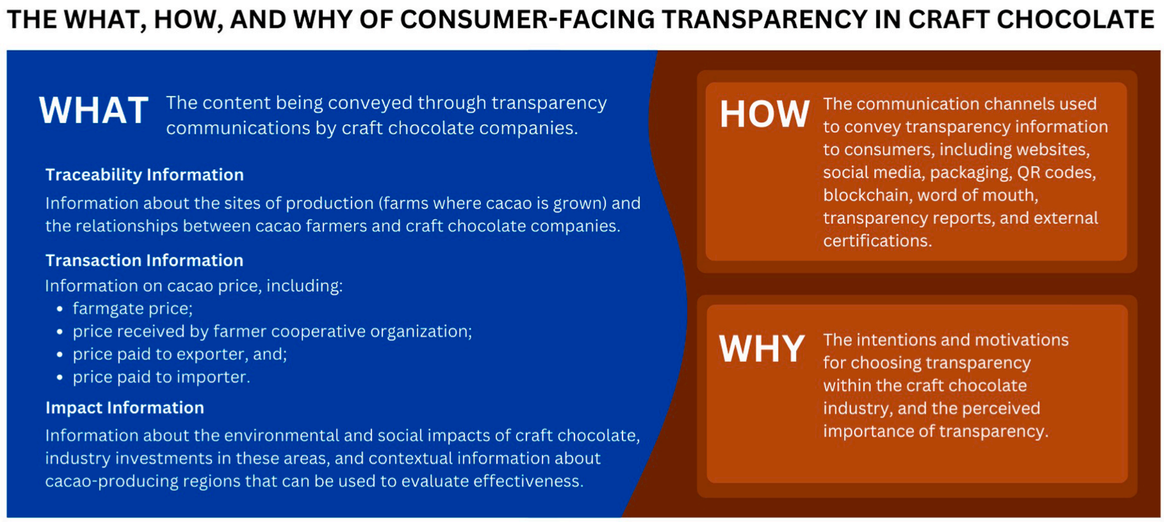

Fig. 1. Framework for exploring the 'what, how, and why' of consumer-facing transparency practices in the craft chocolate industry.

(92%), with the most common information being 'country of origin' (81%) and 'region or community where cacao is produced' (74%). Less than half are sharing information about the 'farmer co-operative' (48%) or the 'precise farm where cacao is grown' (42%).[4] Notably, 100% of survey respondents who were craft chocolate makers know the country of origin where their all of cacao beans were cultivated. In contrast, 50% of re-melt couverture respondents and 17% of confectioner respondents only knew partial origins for their cacao, suggesting that cacao origin is comparatively more important to craft chocolate makers. Larger companies were also more likely to share country of origin or precise farm information for their cacao beans (see Fig. 2). Interview participants clarified that cacao origin location is generally of interest to consumers and thus is commonly shared by craft chocolate companies: "a lot of our customers want to interact with the story of the origin" (M1). Participants asserted that many consumers want to connect to the products they buy, and that sharing origin location is an easily accessible means of fostering this connection without requiring that consumers understand the complexities of chocolate production. While most survey participants were connected to businesses located in the Global North (63%), a substantial minority of participants surveyed were connected to businesses located in a cacao origin country (37%). All survey respondents from outside North America knew country of origin information for 100% of their products.

4.2.2. *Farm relationship*

Most survey participants (88%) shared information about their farm relationship with consumers, including farm sustainability practices and working conditions (69%), stories about cacao farms (63%), photos of cacao farms (65%), and individual cacao farmers' stories (47%).[5] Larger companies were most likely share these details with consumers. Interview participants emphasized that consumers like to know the stories behind the chocolate they buy, and that sharing details about the farm meets that desire. "[Our customers] want to know about the folks who grow—what's the climate like, what's the country like" (M7), said one participant. They identified photos of the farm as being particularly resonant with consumers because they enhance the connection between cacao origins and a bar of chocolate, asserting that "people really relate to that" (M2). However, several interview participants also expressed discomfort with the potential misuse of farmers in sharing their photographs as a marketing strategy. One participant stated that "in general [cacao farmers] are not going to want you to exploit a picture of them" (I1). This discomfort was amplified when participants discussed makers using photographs of farms and farmers that they had no personal connection with.

4.2.3. *Cacao price*

Survey respondents are sharing comparatively less about cacao price, with 39% of respondents indicating that they share no pricing information. Farmgate price (42%) and price received by cacao farmer co-operative organizations (31%) are the transactions most shared with consumers.[6] The largest companies were most likely to share farmgate price: 82% of companies surveyed with ≥ 6 employees shared farmgate price, in comparison to 57% of companies with ≤ 5 employees. Few respondents reported that they are sharing the price paid to importers (10%) or the price paid to exporters (7%). Respondents justified their limited transparency on price due to lack of data and the risk of overwhelming consumers with too much detailed information.

The desire to communicate price information effectively with consumers was echoed in interview discussions. Several interview participants asserted that consumers generally do not have the specialized knowledge required to comprehend cacao pricing. One stated "I would love to talk more about it with people for sure. But I think it gets a little too detailed for what the average consumer really wants to know" (M3). At the same time, participants emphasized the importance of price transparency in the supply chain as a way to support farmer wellbeing. Alongside the interview participants who share cacao price information on their websites or packaging, several participants reported that they only share this information if asked, to ensure consumer interest: "we pay a very high price for our cocoa beans … I'm happy to share that with anybody who wants to know" (M4). Participants also noted that sharing the price paid for cacao helps justify the retail price of their products, especially to consumers less familiar with craft chocolate.

4.2.4. *Use of importers and direct trade*

While 'direct trade' is defined in different ways (see section 4.3.4.),

[4] As craft chocolate companies may communicate several aspects of cacao origin to consumers, survey respondents were able to select multiple options for this question.

[5] As craft chocolate companies can communicate multiple different categories of farm relationship information to consumers, survey respondents were able to select multiple options for this question.

[6] As craft chocolate companies have the potential to communicate a variety of different types of transaction information to consumers, survey respondents were able to select multiple options for this question.

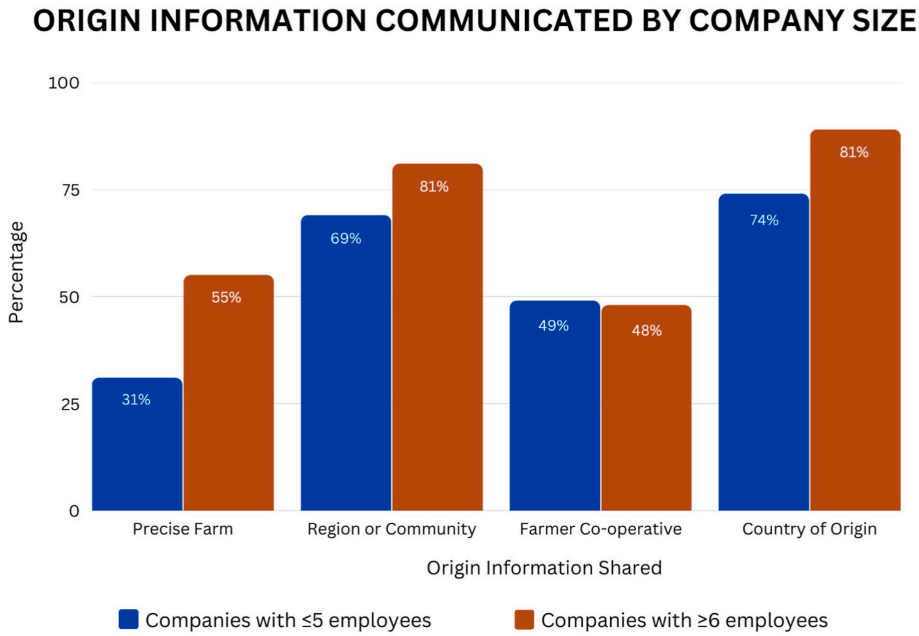

Fig. 2. Origin information categories communicated to consumers by company size.

most survey respondents (75%) reported that they do not use importers and instead purchase cacao via so-called direct trade. Despite this preference for direct trade, interview participants expressed that both direct trade and specialty importers (i.e., middlemen) are necessary, valuable cacao sourcing strategies for craft chocolate companies. A common sentiment among participants was that importers provided opportunities for smaller companies with fewer resources, or companies who are just getting started. One participant stated that "there's not many who have the infrastructure to actually [trade directly]" (M5), while another participant who now buys directly from farmers stated that buying from an importer "[is] what for me started in the beginning, when I was buying fairly small amounts" (M6).

4.2.5. Ecological impact

Environmental sustainability information, which was framed within our survey as information about agricultural practices that mitigate ecological degradation, is being disclosed by 71% of survey respondents. In contrast, information about climate change mitigation and carbon offsets is only being shared by 21% of respondents. Companies established more recently were even less likely to share information about climate change mitigation and carbon offsets. Only 20% of surveyed companies established between 2014 and 2017 and 29% of companies established between 2018 and 2021 share this information with consumers, in contrast to the 40% of companies established between 2009 and 2013 and the 44% of companies established before 2009 that share this information. Some interview participants contextualized the discrepancy between sharing agricultural practices and climate information by explaining how they do not have an explicit climate program. Several participants also discussed the tenuous nature of sustainability for cacao farmers, asserting that "[famers] don't want to pollute their land … [but] if they can't make enough money growing cacao, they have to grow something else [that is potentially more ecologically damaging]" (M7). As one participant stated, "I don't think [environmental sustainability] exists without the farmers getting a fair farmgate price" (V1). Participants valued environmental sustainability as "critically important to everybody's future" (M4) while acknowledging that farmers had to balance sustainability with livelihoods.

4.2.6. Social impact through development projects

Projects at origin are a tangible way of creating social impact within a community at origin. The most popular projects that survey respondents shared with consumers are farmer business investments (57%). For example, one participant stated that their company "[donates] when particular capital projects are needed … we gave money, a large percentage, to build a fermentation drying facility for one of our producers, and they provided the manpower" (M8).

On the other hand, 36% of survey respondents are not engaged in any projects at origin. Several interview participants elaborated that craft chocolate companies are often too small to undertake development initiatives. One participant stated that "[development initiatives are] not something that most makers my size, or, or really, anybody in the industry, I know, could really do much about" (M6). Additional participants expressed doubt that development initiatives beyond direct business contributions are genuinely helpful, stating that businesses operating from a Western context can easily "make things a shitload worse by trying to say 'here, we know best'" (M8).

4.3. How are craft chocolate companies communicating transparency?

Craft chocolate companies use various communication channels—both digital and analog—to communicate with consumers. Notably, most participants rejected third-party certifications (e.g. Fairtrade or Rainforest Alliance/UTZ) as a communication tool even though some acknowledged the efficiency of using certification to convey product information to customers. While transparency reports have the potential to be effective vessels of information, their use is generally limited to a few larger and well-established craft chocolate or speciality cacao companies.

4.3.1. Key communication channels

Survey responses indicate that makers are using a variety of means to communicate transparency practices with the most popular being social media (80%), websites (79%), packaging (66%), and word of mouth (57%) (see Fig. 3).[7] However, interview participants noted the challenge of educating consumers without overwhelming them, particularly

[7] As craft chocolate companies use multiple communication channels to connect with consumers, survey respondents were able to select multiple options for this question.

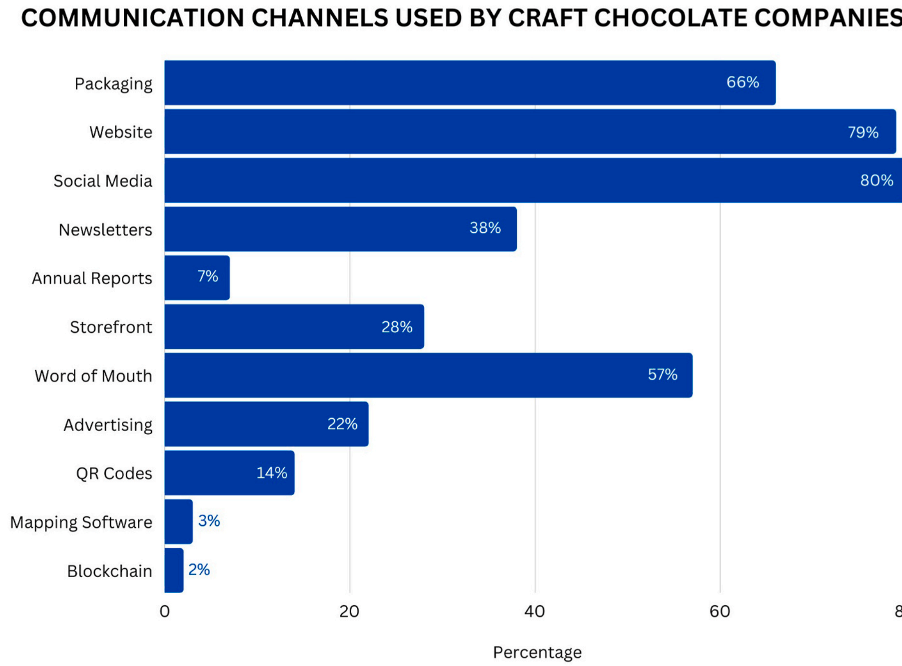

Fig. 3. Communication channels used by craft chocolate companies to share transparency practices and origin relationships with consumers.

regarding product packaging. “I used to have a lot more information on [my packaging],” said one participant, “but it was too much … it kind of flooded people” (M5). Many participants emphasized the power of in-person conversations with customers, stating that it is much easier to communicate complex topics face-to-face. This finding was supported by survey data showing that most participants (57%) use word-of-mouth consumer education strategies.

In contrast, more technological solutions like QR codes, online mapping software, and blockchain are not commonly used by survey respondents, with 82% not using any of the above technologies to communicate origin relationships. When discussing these technologies in interviews, one participant said, “[my QR code is] spectacularly unsuccessful … I think about six people in a year have actually engaged” (R1). However, businesses with ≥6 employees were 10.6% more likely to use QR codes, and no business with ≤5 employees used blockchain, indicating a technological adoption gap between larger and smaller companies. An additional gap can be seen when comparing business age: businesses established before 2009 were the least likely to be using social media (57%) and QR codes (6%) to educate consumers, while businesses established between 2018 and 2021 were the most likely to be using these technologies (100% social media use and 33% QR code use).

4.3.2. Certification

Roughly half (55%) of survey respondents reported that they do not use any external certifications, such as Organic, Fairtrade, or Rainforest Alliance/UTZ, to communicate product information to consumers. Craft chocolate makers were the least likely survey respondent group to use certifications with 72% opting out of any certification use. However, larger companies were 10% more likely to have at least one external certification. Interview participants were predominantly negative about the value of certifications, for example by claiming: “the certification process … is quite costly, and I don’t think it adds any great value to the product” (M9). Multiple participants asserted that certification programs exclude smaller farmers: “there are plenty of farmers who want to be certified, but they can’t afford it” (M4). As such, participants valued interpersonal relationships more highly than certification: “if we know that the growers and the people working the processing plant have fair conditions, that’s actually more valuable to us than having a Fairtrade logo on our chocolate bar” (M2). However, interview participants had an acute awareness that certifications are desired by consumers as “an indicator that somebody looked at [the product] and that it complies with some well-known standard” (M1). Despite their misgivings, some participants have moved forward with—or are considering—certification because “certifications make it easy for consumers to make choices” (M3).

4.3.3. Use of transparency reports

Transparency reports provide a snapshot of various impact measures from a single year and are a potential tool for indirectly measuring the effectiveness of transparency, when created consistently and aggregated over time. Most survey respondents (77%) do not currently have transparency reports. Of the remaining respondents, 9 companies have a transparency report (14%) and 5 have ‘something similar’ (8%). This data was cross-tabulated with company size, revealing that transparency reports were much more popular among larger companies. The majority (81%) of businesses with <26 employees lack a transparency report. In contrast, most (75%) businesses with ≥26 employees have a transparency report or similar. Interview participants suggested that businesses not buying directly from farmers often rely on transparency reports produced by importers and occasionally reshare these reports instead of writing their own.

4.4. Why are craft chocolate companies committing to transparency?

Craft chocolate businesses identified multiple motivations for transparency including moral imperative, customer satisfaction, quality assurance, and supply assurance. Additionally, survey respondents and interview participants overwhelmingly asserted that the craft chocolate industry perceives themselves to value transparency more highly than chocolate consumers. Although participants expressed disillusionment in transparency as a tool to generate tangible change, they also asserted that transparency does have a positive impact in certain areas.

4.4.1. Motivations for transparency

Interview data allowed us to gather in-depth information about specific motivations for transparency within the craft chocolate industry. Based on our interview data, ethics and morals are a significant motivation underpinning transparency. Numerous informants explained how personal values related to equity and sustainability are at the forefront of their business decisions. To illustrate, one participant said, "we don't want to … have our family name associated with things that don't match our morals and values … even if we could make more money doing it, we would choose not to" (M1). The decision to choose values over money echoed strongly throughout many interviews. As another participant stated, "we have our baseline of what … we think our ethics or our principles are, and that's not going to change based on consumer trends" (M3). Many participants spoke about wanting to ensure that the production causes as little harm as possible.

Interview participants also stated that customer satisfaction was an additional motivator because customers are more likely to "[buy] a story and an experience" (M1). A commonly stated theme was that "people want to know more about their food" (R1), and that being able to connect the consumer to a product's entire production journey was a "marketing value add" (M1). Another participant articulated that "people buy and stick to [our company] because of what we represent and what we stand for" (M10). Participants credited transparency with enabling effective storytelling that made consumers feel more fulfilled as a result of their purchase.

Additionally, interview participants articulated that transparency practices allowed them to purchase higher quality cacao beans. Participants explained the importance of being able to see the farming process and work with farmers to ensure the cacao meets quality standards. "[We] are engaged and … go down to every single one of our origins and see what's happening down there" said one participant, "[when] you understand what's going into it … you're getting something that is high quality" (M8). Witnessing the farming process first-hand in turn facilitates building long-term connections and active collaboration with cacao producers. "We started working with them on ... getting the beans fermented properly and dried in a clean area, we helped them build drying beds. And we worked with them on that for quite a while" (M4).

Lastly, interview participants emphasized the importance of building trustworthy, respectful relationships with cacao farmers working at origin. The sense of security and predictability associated with long-term relationships between makers and producers was highlighted as a motivation, with one participant stating that farmers will think "I should … not sell my cacao somewhere else because I have this commitment … with this person who came down here to meet me and shake my hand on my land'." (V1). Multiple participants asserted that this stability is what allows businesses across the supply chain to grow and expand to a sustainable size. "When you work directly with a farm, if you treat each other with respect, then you both end up with a better situation later on" (M6).

4.4.2. Perceived importance of transparency

Most survey respondents (73%) stated that they value transparency more than they perceive that their customers do (see Fig. 4). Interview participants were quick to note that while a subsection of customers does care deeply about transparency, many consumers buy craft chocolate for reasons beyond transparency, most notably taste. One participant stated that "a lot of our customers want to buy a chocolate bar that's delicious" (M1), while another said that "[customers] are much more drawn towards something that has flavor in it than a single origin" (M7). Participants frequently mentioned the moral aspects of their work, and several suggested that transparency could be of greater importance to makers because they are more educated on the challenges faced by cacao-producing regions.

Cacao origin transparency also appears to be valued more by businesses established in later years (see Fig. 5). While 60% of surveyed businesses established before 2009 believe origin transparency is "extremely important," 17% believe that it is only "somewhat important" and 12% believe it is "not important" at all. Additionally, only 33% of businesses established between 2009 and 2013 believe that origin transparency is "extremely important." In contrast, 80% of businesses established between 2014 and 2017, and 100% of businesses established between 2018 and 2021 state that origin transparency is "extremely important". To summarize, while most survey respondents indicated that transparency is important to them, those connected to more recently established businesses were more likely to place a higher emphasis on the value of origin transparency.

4.4.3. Effectiveness of transparency

Beyond logistical barriers to transparency, interview participants expressed doubt about the effectiveness of transparency as a tool for change. Multiple participants stated that consumer-facing transparency is largely a marketing strategy to drive purchase: "I think the transparency in a lot of companies' cases is just trendy, so they can fit into the conscious buying fad" (V1). Several participants also asserted that consumer-driven transparency is often superficial: "unfortunately, the vast majority of customers are looking for a stamp, and they're looking to feel good [about their purchase]" (M8). Participants asserted that transparency for the sake of vanity was irresponsible. "I think sometimes we oversell how much we contribute to [farmers]," stated one participant, "we maybe believe our own press a little too much" (M1). Multiple

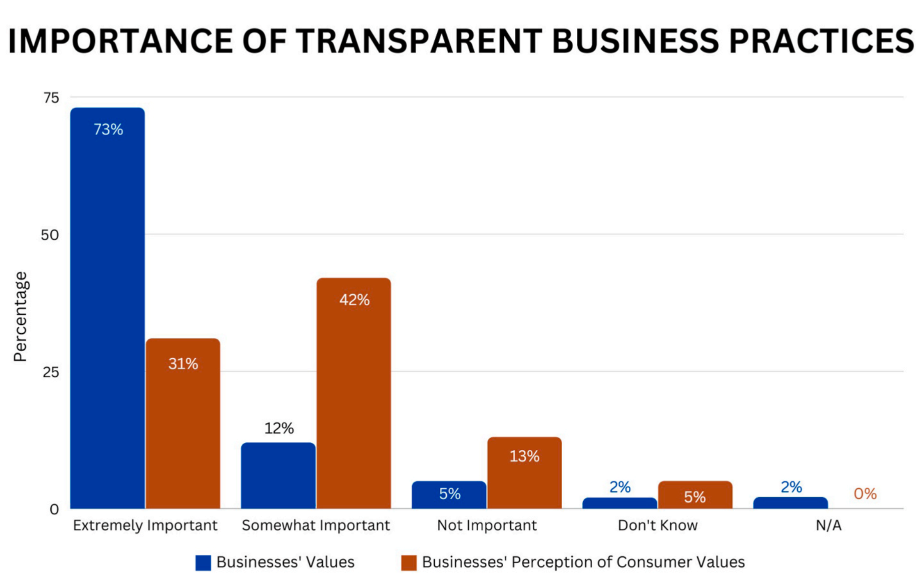

Fig. 4. Perceived importance of transparency between craft chocolate makers and consumers.

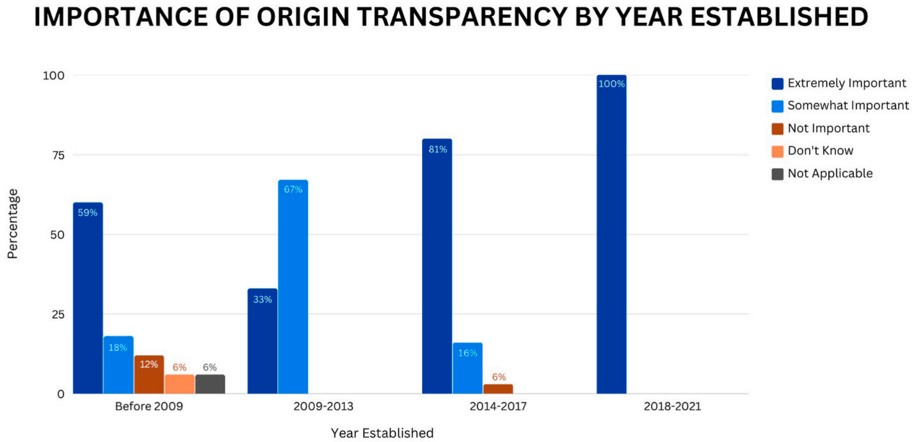

Fig. 5. Business' perceived importance of origin transparency by year established.

interviews discussed how "the real work being done on the ground is questionable at best" (V1) and "heavily weighted by the [ideas] of white privilege and white supremacy" (M8). There was an uncertainty that craft chocolate companies have the potential to move beyond small-scale change through transparency practices. In addition, several participants expressed the belief that transparency is not necessarily entirely positive. This was expressed perhaps most aptly by one participant when they stated: "you can trade transparently and directly and still be completely fucking over your farmers" (M8).

However, participants also expressed hope that transparency can lead to a better future for the chocolate industry. They asserted that, even at a small scale, common business practices in the craft chocolate industry do improve lives. "If [farmers are] getting 30% more on their cash crop," said one participant, "I don't want to oversell this because I think we're guilty of that as chocolate makers sometimes, but it's significant" (M1). Many participants asserted that paying above market price has a tangible effect on a farmer's income and living conditions, and that communicating about that impact increases consumer awareness. "Transparency makes the end consumer more aware of where their products come from" (V1), which can drive consumers to seek better standards as compared to the conventional chocolate industry. As one participant noted, "the marketing departments [of conventional chocolate companies] know that consumers are looking for [increased ethics in sourcing and production]" (M2).

Participants also believed that while not a panacea, transparency does have the potential to make chocolate production more ethical by increasing accountability throughout the entire supply chain. "It's been my experience that [if] people can see what's going on … then they're less likely to try and sneak things past, said one participant, "if something's visible, generally people do the most ethical thing" (M6). Traceable supply chain practices were mentioned specifically as a means of improving conditions for farmers: "I would hope that traceability would make the entire import-export system more accountable" (R1). Ultimately, participants asserted that more transparency in the craft chocolate industry has the potential to create sustainable, long-term business relationships where cacao farmers "have enough money to survive, and hopefully thrive" (M8).

4.4.4. Barriers to transparency

Interview participants emphasized that the smaller scale of the craft chocolate industry makes it difficult to use transparency as a means to create change. Specifically, our study participants identified the following barriers to effective transparency: business size, high cost of travel, challenges building trusting relationships, lack of consumer education, and the lack of common definitions and standardized practices in the craft chocolate industry. For example, one participant stated: "I think sometimes … [that] craft chocolate won't solve this supply chain issue of cacao because we're too small" (M2). Another said: "we're such a small organization that all we can do to help right now is buy cocoa beans" (M9). The fact that most craft chocolate companies are small and have limited resources creates challenges associated with travelling to origin. "It would be fascinating for us to go visit," said one participant, "but that would take up most of our—take all of our—money. And we'd rather use our money to buy more beans and directly support through purchasing the product that they're growing" (M3). The sentiment that unless craft chocolate makers could do more from afar was echoed in several interviews: "unless you are sourcing those beans, and you're going to be like on the ground for six months of the year for the harvest, the fermentation, and the drying ... helping and controlling over that six-month harvest period, then … you're just in the way" (M5).

The distance between farmers and makers can also make creating and maintaining transparent, trusting relationships more challenging. "Small makers don't have a choice but to trust" (M8), stated one participant, which can be particularly difficult when working with new suppliers. For example: "People will send you a sample … and then when you actually ... buy it, it's not the same as the sample they sent you" (M5). While trust is improved by developing interpersonal relationships, this often takes more effort for smaller companies: "the big guys, they can send people in country, we often can't do that" (M2). Multiple participants asserted that long-term trusting relationships are incredibly valuable, and that they are a foundational part of what is most often communicated back to consumers: "they want to know that you're paying attention to [the details], and that they can trust you, and that you're watching everybody else up the chain" (M1).

Deficits in consumer knowledge were also identified by participants as a barrier to transparency. "Depending on the customer's level of understanding, they often come with a preconceived notion of what the situation is," (M9) that may or may not be correct. The lack of customer education was frequently highlighted during the interviews, particularly in relation to justifying the higher cost of craft chocolate. Participants stated: "chocolate has been cheapened. And I think that has been a massive problem" (M5), and "I get that question 'why is it so expensive?' … all the time" (M4). Interview participants asserted that reframing chocolate can be difficult when consumers are used to buying from companies "like Nestle and Cadbury" (M9). However, there is a tricky balance between effective education and overwhelming consumers as "sometimes customers' eyes glaze over when you start to get into a lot of [pricing] details" (M7). Participants also asserted that not everyone wants to be educated: "there's still obviously a lot of people that really don't care" (M5). Regardless, many participants believed that they have a "responsibility to educate people about what they should be looking for" (M8).

Additionally, interview participants asserted that the challenges of consumer education are exacerbated by a lack of standardized definitions in the craft chocolate industry. Specifically, terms like “bean-to-bar” and “direct trade” were critiqued for being nebulous. “Everything is bean-to-bar,” said one participant, “it all starts with a bean and ends with a bar” (M8). Multiple participants asserted that because bean-to-bar could theoretically encompass any chocolate company, craft or conventional, it was a “useless phrase” (M3) for conveying the actual ethics behind craft chocolate. The term ‘direct trade’ was similarly critiqued as having multiple different meanings, including “literally bank account to bank account” (M6) but also simply “knowing where [the cacao beans] come from and how they get to [the maker]” (M2) at an interpersonal level. While several participants articulated that a lack of standardized terminology impeded effective consumer education, there was a general understanding that the impact and ethics behind a business decision were more important than the exact words used to describe it.

5. Discussion

As global supply chains expand, there has been a consumer shift wherein companies are being asked to manufacture products that are visibly socially and environmentally responsible [1,42]. Chocolate, which is inherently reliant on complex supply chains spanning disparate geographies, fits neatly into this demand for increased transparency and ethical sourcing practices [20,39,43]. The craft chocolate movement has been particularly responsive to transparency demands in an “attempt to address the social and environmental shortcomings of conventional chocolate production” [15], p. 1]. However, our study indicates that the source of motivation for increased transparency is *not* rooted in the consumer base as would be expected, but rather from a shared desire to be transparent that appears to be intrinsic to the craft chocolate community.

This finding is corroborated by the ethical niche concept of Woolley et al. [15], who assert that craft chocolate makers prioritize social good over market goals with entrepreneurial models based on values-driven sourcing and cooperative relationships in cacao supply chains. Our study participants were committed to creating not just high-quality chocolate, but *ethical* chocolate, for which transparency is the foundational prerequisite. Craft chocolate producers perceive themselves as the drivers of their own corporate transparency but also the primary source of education for consumers [11]. It remains to be seen whether this business-led, voluntary, and unregulated approach to information disclosure in the craft chocolate industry can lead to the positive environmental impacts and socioeconomic development at origin that are the ultimate aim of transparency. Further, it is unclear whether the transparency values in the craft industry will spill over to commodity cocoa supply chains.

Perceptions of consumer knowledge informed how chocolate makers chose to be transparent, specifically which types of information they shared. Of the types of information being shared by participants—-traceability, price, and social and ecological impact—the only universally shared information was cacao origin location, arguably the most basic kind of information. Cacao origin location alone does not mean that the product is inherently ethical or sustainable, but study participants identified this category of information as both readily available to producers and easily digestible by consumers. However, most participants identified accessing origin information through direct sourcing relationships, indicating the desire to build long-term, mutually beneficial relationships with cacao suppliers. Given the complexity of contemporary global supply chains, sharing any form of sourcing information symbolically indicates a certain level of transparency that consumers associate with a more ethical product [44]. Sharing cacao origin information in the craft industry may have spillover effects into the conventional supply chains that comparatively have massive strides to make concerning transparency, as most conventional chocolate has no indication of origin. The commodification embedded in conventional chocolate poses significant challenges to identifying and disclosing cacao origins [45].

Disclosing cacao origins situates chocolate in place, creating an immediate connection with the product through storytelling and a shared feeling of humanity [17]. Cacao origin stories ground products in place, terroir, and people. This not only helps consumers feel connected to their food but creates an opportunity to learn about food sustainability. Sharing cacao location therefore functions both as a marketing strategy for the craft chocolate industry and a means of meeting moral objectives related to sustainability. In contrast, information shared less frequently—most notably transaction information—was identified as an area that may disinterest consumers. When transaction information was shared, it was often used to justify the higher price of craft chocolate. While craft chocolate makers are morally motivated to be transparent, they also prioritize communicating the types of information that they believe will most interest their consumers and incentivize purchase, querying the claim that craft chocolate makers are fundamentally driven by nonmarket goals [15].

How feasible is transparency that inspires effective action? Both interviews and survey data indicated that company size influences transparency initiatives, with smaller companies often lacking the financial and staffing resources needed to create transparency reports, invest in projects at origin. Due to the costs of establishing direct trade relationships, smaller businesses frequently rely on importers and are more likely to re-share transparency reports as they lack the resources to create their own reports. Specialty cacao traders appear to be key actors in operationalizing sustainability in craft chocolate supply chains. Similar to many agrifood commodity sectors, the traditional role of traders has evolved beyond simply moving products between locations to include sharing critical information for realizing sustainability objectives [46]. Small business size and a lack of capital in craft chocolate in part explains the rarity of ‘technological solutions’ to transparency such as online mapping software and blockchain, both of which create increased cost and labor demands [2]. When combined with the moral drive of participants, one can assume that the potential of transparency initiatives in the craft sector might be stymied by a lack of resources rather than unwillingness to act.

While business size may be cited as a barrier to craft chocolate makers enacting positive change at origin, one advantage of the craft chocolate industry over conventional chocolate is the minimal barriers to entry for newcomers. Some of the finest chocolate makers began as micro-businesses making chocolate at home [Chocolate Alliance, 2022, personal communication]. Despite its laudable aims, the information transparency agenda risks adversely affecting this innovation and entrepreneurship. Further, the craft chocolate industry is in a unique position because it relies less on third party certification as compared to conventional supply chains. While some chocolate makers have organic certification, these are relatively rare, and almost none have Fairtrade or Rainforest Alliance/UTZ certification [15]. Given the critique of these voluntary sustainability standards [47], the craft industry may be in a unique position to pioneer other means of assuring positive environmental and social impacts.

It is important to highlight the potential drawbacks or adverse consequences of transparency. Our findings demonstrate that there is potential for transparency to be employed only as a superficial marketing tool with the goal of reassuring consumers about their purchase decisions. Research into corporate social responsibility suggests that companies are more likely to invest in initiatives that are observable to the end consumer [48]. As consumers are held personally responsible for their individual consumption choices, transparency practices can therefore be used to communicate to a consumer that they are making a morally good decision [17,49,50]. Ultimately, there is the possibility that transparency will be used as an end goal instead of as a tool to create positive change.

6. Conclusions

In this study we answer questions about how the craft chocolate industry perceives and enacts transparency. However, we also raise questions around the effectiveness of these transparency practices. The craft chocolate industry has a complex relationship with transparency: while there is a level of disillusionment from craft chocolate makers about the ability of transparency to create genuine large-scale change, these same makers remain hopeful that transparency—when used as a means instead of an end—can foster environmental and social benefits at origin, enable corporate accountability, and have positive spillovers to the conventional chocolate industry. Measuring the effectiveness of transparency is a challenging task for a variety of reasons, including the time and resources needed to pursue research at origin. One potential place to start would be to explore which transparency-informed strategies craft chocolate companies perceive as making a tangible impact, and foremost, identify what these companies consider effective impact. Other entry points would be to identify the harms that craft chocolate aims to solve and compare effective resolution strategies to current craft chocolate company actions, or to explore how consumers perceive and act upon transparency practices that are currently employed within the craft chocolate industry. Lastly, research in this area should move beyond transparency solely within the craft chocolate industry to explore the impacts of craft chocolate value chains on commodity chocolate production. We believe that this work should be done in collaboration with industry stakeholders to generate knowledge with practical application.

Additionally, our work focused on consumer-facing transparency communication. There is an assumption that educating consumers will trigger them to 'vote with their dollars' which will then pressure companies into more ethical business decisions. However, our research corroborates a growing body of knowledge that craft chocolate makers are just as values-driven as their consumers, if not more so. As such, consumers are not the sole group that should be considered in transparency studies. It is important to explore who else might benefit from transparency initiatives, and how. For example, studying how transparency initiatives impact cacao farmers and their communities, or how regulatory bodies interact with and govern transparency, would provide a new perspective on transparency initiatives, and potentially further insight into effective transparency. Further research is needed to explore exactly what this might entail within craft chocolate and beyond.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The authors do not have permission to share data.

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Appendix A. Background Data

A.1 General information about companies

- o Q2 Role in the industry
- o Q3 Number of employees
- o Q4 Primary region
- o Q5 Where customers are located
- o Q9 Date of establishment

The majority (68.7%) of survey respondents self-identified as bean-to-bar chocolate makers, with an additional 9.0% identifying as re-melt couverture chocolate makers and 10.4% as confectioners. The remaining 11.9% of respondents identified as none of the options, selecting 'other'. The respondents in this category included farmers, educators, importers, and researchers.

Number of employees was used as a size metric for this study. The majority (55.2%) of survey respondents have five or less employees, and an additional 38.8% of respondents employ between six and twenty-five people. Cumulatively between the four other answer choices, 6% of the respondents have more than 25 employees.

While the Chocolate Alliance Professional Network contains companies from around the globe, 67% of respondents were from North America. There were respondents from Central America, South America, Europe, Africa, Asia/Pacific and 'other' but each of these categories made up less than 10% of the total.

Date of company establishment was divided into four categories: before 2009 (26.9%), 2009–2013 (10.4%), 2014–2017 (46.2%) and 2018–2021 (16.4%).

A.2 – Knowledge of cacao origins

- Q10 Use of importers
- Q11 Knowledge of origin
- Q12 Country of bean origin
- Q6 Located in cacao origin country or not

The majority (93.8%) of respondents claimed to know the origin country for 100% of their cacao beans, while zero respondents knew nothing about the country of origin of their beans.

When asked whether they use importers to purchase cacao, 74.5% of respondents said they do not use any importers and instead purchase directly. It is important to note that the definition of direct trade may be interpreted differently by respondents. Interview participants expressed that both direct trade and specialty importers are necessary options, and their viability depends on a number of factors, including size and experience.

Appendix B. Survey Questions

1. I consent to take part in this survey [Single selection]
   a. Yes
   b. No
2. What is your primary role in the cocoa industry? [Single selection]
   a. Chocolate maker Bean-to-bar
   b. Chocolate maker Re-melt couverture
   c. Baker
   d. Pastry Chef
   e. Other (Please Specify)
3. How many employees do you have? [Single selection]
   1. Under 5
   2. 6-25
   3. 26-50
   4. 51-75
   5. 76-150

6. >150
4. Select the region where your company is located. [Single selection]
   a. North America
   b. Central America
   c. South America
   d. Europe
   e. Africa
   f. Asia/Pacific
   g. Middle East
   h. Other (Please Specify)
5. Where are most of your customers located? (please rank in order from most to least common) [Single selection]
   a. Locally (within 50 mile radius)
   b. Regionally (within the state or Province where you are located)
   c. Nationally (within the country where you are located)
   d. Internationally
6. Is your business located in a cacao origin country? [Single selection]
   a. Yes
   b. No
   c. N/A
7. Does your product use any certifications? If so, what are they? [Multiple selection]
   a. Fair Trade USA
   b. Fairtrade international
   c. Fair for Life
   d. Organic
   e. Rainforest Alliance
   f. None of the above
8. Where do you sell or retail your chocolate products? [Multiple selection]
   a. We have a single retail store
   b. We have multiple retail stores
   c. Farmer's Market
   d. Grocery Stores (ex: Supermarket)
   e. Gift Shops
   f. Coffee Shops
   g. Specialty stores
   h. Your own company website
   i. Third party website
   j. Oher (Please Specify)
9. When was your business established? [Single selection]
   a. Before 2009
   b. Between 2009 and 2013
   c. Between 2013 and 2017
   d. Between 2017 and 2021
10. Do you use importers to purchase cacao? [Single selection]
    a. Yes- (if so, specify) [Multiple selection]
       i. Olam
       ii. Meridian
       iii. Uncommon Cacao
       iv. Chocolate Alchemy
       v. ECOM
       vi. Other
    b. No–I purchase directly
11. Do you know the country where your cacao beans were cultivated? [Single selection]
    a. Yes- We know country origins for 100% of our beans or chocolate products.
    b. Partially- We know origins for about 75% of our beans or chocolate products.
    c. Partially- We know origins for about 50% of our beans or chocolate products.
    d. Partially- We know origins for about 25% of our beans or chocolate products.
    e. No-we don't know any of the origins of our beans or chocolate products.
    f. Not applicable
12. What countries are your cacao beans sourced from? (Please list, if applicable) [Open text box]
13. Do you disclose information about the origin of your cacao with consumers? [Single selection]
    a. Yes
    b. No
    c. N/A
14. Please rank the following, in order from most important (1) to least important (4). In your opinion, what kind of information is most important when it comes to transparency in chocolate? [Ranked list]
    a. Origin information that reports precisely where the cacao was grown
    b. Transaction information that reports on cost and price sharing along the supply chain
    c. Environmental sustainability information such as agroforestry, climate emissions, deforestation, biodiversity impacts
    d. Socioeconomic development information such as investments in community well-being on farms
15. What information are you sharing with consumers regarding cacao location? [Multiple selection]
    a. Precise farm where cocoa is produced
    b. Region or community where cocoa is produced
    c. Farmer cooperative
    d. Country of origin
    e. Other (please explain)
16. What information are you sharing with consumers regarding cacao price? [Multiple selection]
    a. Received by farmers (Farmgate Price)
    b. Received by cocoa farmer cooperative organization
    c. Paid to exporters (FOB Price)
    d. Paid to importers (storage and transport prices included)
    e. Other (please explain)
17. What information are you sharing with consumers regarding relationship with the farm? [Multiple selection]
    a. We disclose information about the farms sustainability practices and working conditions
    b. We disclose stories about our relationships with the farms where our cocoa is produced
    c. We show photos of the farms where our cocoa is produced
    d. We highlight individual cocoa farmers and tell their story
    e. Other (please explain)
18. What information are you sharing with consumers regarding projects at origin? [Multiple selection]
    a. Farmer business investments (training, education, tools for farmers)
    b. Community healthcare and
    c. Youth education and scholastic advancement at origin
    d. Women at origin business initiatives
    e. Other (please explain)
19. What information are you sharing with consumers regarding ecological impact? [Multiple selection]
    a. Environmental sustainability practices-e.g., chemical application (pesticide, herbicide, fertilizer application)
    b. Climate change mitigation and carbon offsets at origin
    c. Other (please explain)
20. What information are you sharing with consumers regarding general education? [Multiple selection]
    a. History of cocoa farming in the region where our cocoa is produced

b. Images and stories about the geography and ecology of the region
c. Information on the social and cultural practices of people in the region
d. Other (please explain)

21. How is origin information communicated to consumers? [Multiple selection]
    a. On our packaging
    b. On our website
    c. On our social media
    d. In our newsletters
    e. In annual reports
    f. At our storefront
    g. By word of mouth
    h. Advertising
    i. Other (please specify)
    j. Not applicable
22. Do you have an origin transparency report? [Single selection]
    a. Yes
    b. No
    c. I have something similar (please specify what you call it below)
23. Do you use any of the following technologies to communicate origin relationships to consumers? [Multiple selection]
    a. QR Codes
    b. Online Mapping Software
    c. Blockchain
    d. No
    e. Other (please specify)
24. Have your sales increased or decreased over the past two years? (please indicate percentage below) [Single selection]
    a. Increased
    b. Decreased
    c. Stayed the same
    d. Don't know
25. How important is origin transparency to your business? [Single selection]
    a. Extremely important
    b. Somewhat important
    c. Not important
    d. Don't know
    e. N/a
26. In your opinion, how important is origin transparency to your customers? [Single selection]
    a. Extremely important
    b. Somewhat important
    c. Not important
    d. Don't know
    e. n/a
27. Do you have a company website and are you comfortable sharing it? [Single selection]
    a. Yes, I have one, but I don't want to share it
    b. No, I don't have a website
    c. Yes (provide below)
28. Are you willing to be contacted for a follow-up interview? [Single selection]
    a. No
    b. Yes (Please provide your email below)

Appendix C. Interview Guide

1. Tell me about why you got into the craft chocolate industry?
2. In the survey, we gathered your opinion on the most important factors of transparency in the chocolate industry by asking you to rank four different elements of transparency.

Your ranking was:

a. 1
b. 2
c. 3
d. 4

Tell me about your reasoning behind these choices.

3. What is your company's motivation for tracing where your cocoa is cultivated?
4. In your survey responses, you answered that you disclose origin information with consumers. What do you think is the business case for sharing all this information?
5. For this next question I'm going to remind you of all the types of origin information you indicated that you are sharing.

[Insert Origin Information Shared]
How are you getting this information?

[Insert specific questions regarding information this company is sharing. Ex: I see that your business is transparent about the farmgate prices that you pay. I'm curious what motivates you to share this information and how do you think it's received by customers?]

6. How do you communicate this information with your consumers? What information are you sharing and in which ways?
7. How does sharing this information positively impact the places where your cocoa is being grown?
8. What do your customers' value about origin disclosure?
9. In your survey responses you indicated that you [use/don't use] importers to purchase your cocoa. What motivates you to purchase cocoa through [importers/directly from farmers]?

If using importers: Have you considered the alternative possibility of purchasing directly and what do you see as the main barriers of doing so?

If direct trade: Have you always sourced using direct trade or did you start out with importers? Is it hard to establish direct trade relationships?

10. What are the most difficult barriers to tracing cocoa origins? (or knowing where your cocoa is coming from?)
11. In your survey responses, you indicated that you [do/don't] certification schemes. Why [do you/don't you] participate in certification schemes? What do you see as the pros and cons of formal sustainability certifications for small businesses like yours?
12. How do you expect sustainable sourcing and tracing origins will change in the craft industry in the coming years? What innovations do you hope to see and what aspirations do you have for the craft chocolate industry related to sustainability and origin transparency?
13. Do you have anything else to add that hasn't already been covered?
14. Can you recommend other people that I can reach out to for this study?

Optional: If any of the following terms are brought up in responses these can be applied as optional follow-up questions:

- How would you define transparency?
- How would you define direct trade? Do you classify yourself as participating in direct trade?
- How would your company define bean-to-bar? Do you classify yourself as bean-to-bar?
- What does the term 'single origin' mean to you?

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