Concerns and Conditional Intentions about Còn Ngon An Exploratory Questionnaire Study of Food Businesses and Prospective Buyers Reporting Food-Budget Difficulties in Hanoi

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ABSTRACT

I examined concerns, conditional intentions and support needs for Còn Ngon, a proposed service connecting buyers in Hanoi with discounted unsold food for local collection. I analyzed 49 buyer questionnaires and 51 food-business questionnaires from a convenience sample. The buyers reported food-budget difficulties. I analyzed the initial and additional batches separately: 19 and 30 buyer questionnaires, and 41 and 10 business questionnaires. Buyers answered through chat or in person; businesses answered through chat, online forms or in person. Among buyers, 17/19 initially and 15/29 in the additional batch selected categories 4–5 for trial, compared with 5/19 and 4/29 for repeated use. For missed collections, 32/41 initial businesses and 9/10 additional businesses selected concern categories 4–5; the corresponding hygiene counts were 31/41 and 9/10. Buyer hygiene concern also differed between batches: 2/19 initially and 20/30 in the additional batch. The discount questions recorded consideration bands rather than decisions about specific offers. My findings support testing collection reliability, food information and continued use in a prototype. Convenience recruitment, batch differences and incomplete reconciliation of original response records limit interpretation. I did not observe purchases or measure waste reduction.

Keywords: surplus food; self-pickup; food-budget constraints; stated intention; Hanoi

INTRODUCTION

Discounted unsold food can offer value when its price, suitability and collection arrangements fit both buyers and food businesses. I am developing Còn Ngon to connect nearby buyers with prepared food that remains unsold and has not been served to customers. The questionnaires used the earlier project name Food Rescue. Research on 252 households in Hanoi distinguishes household preparation waste from food left uneaten, providing local context while studying a different source of food from the unsold business food addressed here. I do not use its historical estimates to describe current citywide conditions [1].

Food-sharing research points to economic motives, food suitability, safety, convenience and staff effort as relevant considerations. Interviews with 42 foodservice providers in Barcelona emphasized economic benefits and barriers involving low food-waste awareness, resources and technical expertise; Japanese platform research combined ten platform cases with a survey of 10,000 consumers and examined the attractions and operating difficulties of food sharing. These studies concern different services and recruitment settings, so their findings guide questions rather than predictions for Hanoi. A six-student Norwegian crossover pilot found no measurable change in waste, spending or diet during app use and reported problems involving food quantities and collection opportunities. That compensated, industry-initiated pilot offers operational lessons rather than an effect estimate transferable to this questionnaire [2]; [3]; [4].

I asked which concerns, expected benefits, discount consideration bands and support needs the recruited buyers and businesses reported before testing transactions. I distinguish trial from repeated-use intentions because stating an intention does not establish subsequent action. Social-supermarket research also provides

context for asking about social judgment, although my single item is not a validated adaptation of its constructs. I use the questionnaire results to identify tasks for a local prototype study [5]; [6].

I organize the study around three descriptive research questions. First, how do the recorded intentions to try, place an initial order or listing, and use the service repeatedly differ within each respondent group and batch? Second, which food, collection and operating concerns do buyers and businesses report? Third, what discount consideration bands, access conditions and support priorities would need further examination through specific offers and observed tasks? I formulated these questions for the present analysis after collection began; they were not preregistered hypotheses.

My contribution is a contextual account of the conditions that the two sides of a proposed local service describe before transactions occur. I distinguish expected benefits, intentions and practical participation conditions because an answer in one category does not establish an outcome in another. I compare the two respondent groups at the level of reported issues; they are not matched buyer–outlet pairs. This framing connects the intention–behavior distinction with the operating considerations discussed above without claiming to test a causal model or introduce a validated theory of adoption.

METHODS

A. Design, recruitment and response modes

I conducted an exploratory questionnaire study using separate Vietnamese instruments for prospective buyers and food-business representatives in Hanoi. I recruited through project outreach and personal contacts, using convenience sampling. Buyers answered through chat and in person. Businesses answered through chat, direct online form submission and in person. I have not established the number of responses collected through each mode or entered on a participant's behalf. I therefore report the modes used without assigning unsupported counts to them.

I retained two Zalo recruitment screenshots. The invitations describe the service, mention possible business cooperation and request a research-form response; one explicitly states that participation is voluntary and creates no obligation to cooperate. I cannot calculate a response rate because I do not have a reconciled count of invitations.

I analyzed a fixed copy of the response sheets saved on 14 October 2026. The buyer sheet contained 92 questionnaires and the business sheet contained 51. I compared these records with the live sheets on 16 October. All 143 timestamp cells differed, but the answers, headers and number of records were unchanged. I retained both timestamp versions in a separate log; Appendix C specifies the date ranges and remaining source checks. I developed the analysis and inclusion rules after data collection had begun and did not preregister the study.

Batch definitions

Batch	Rows in the fixed response sheets	Questionnaires before screening	Retained questionnaires
Initial buyers	2–63	62	19
Additional buyers	64–93	30	30
Initial businesses	2–42	41	41
Additional businesses	43–52	10	10

I use "initial" and "additional" to identify the two blocks of records in each response sheet. I did not randomize their composition or treat the additional batch as a confirmatory replication. I used the participant-pool workbook for administration and did not count its profiles as additional observations.

B. Eligibility and measures

I screened buyers for recorded consent, age 18 or older, living or working in Hanoi, food-expense difficulty sometimes or often in the preceding three months, and no other household member having answered. For businesses, I required recorded consent, an adult respondent, a Hanoi outlet, and an owner, manager or authorized employee familiar with its handling of unsold food. I requested one response per outlet. The buyer screen is not a validated food-insecurity classification: FAO's FIES uses eight experience-based questions [7].

The buyer questionnaire contains 33 prompts, U00–U32, and the business questionnaire 28, R00–R27. They cover eligibility, characteristics, food and collection arrangements, concerns, expected benefits, conditional intentions and support priorities. The original Vietnamese questions and options are reproduced in Appendix A. I retain the original participant-information text with the study records. Appendix A contains the questionnaire wording and documented invitation text; it does not reproduce the complete historical information screen.

Concern, agreement and intention items have five ordered substantive categories plus uncertainty and refusal options. I report each item separately. “High” means categories 4–5; the middle category remains in the denominator. Intention items assume suitable food and a functioning app, with suitable prices additionally specified for buyers. They ask about trial, an initial order or listing, and repeated use during the next 30 days.

R19 combines returns, time and participation costs; U23 combines food savings and collection costs, and R16 combines staff time and workload. Several U29 support options also bundle information or assistance components. These are single items containing combined judgments, not validated multi-item composites. I retain their recorded distributions but do not infer measured profitability or net savings from them. U22 and R18 concern expected interface difficulty, not demonstrated usability. I have no documented cognitive pretest or validated scale adaptation for these questionnaires. U24 asks about an obligation to reciprocate without specifying its meaning; I retain its distribution in Appendix B but do not use it to interpret participation concerns. U26 and U27 are closely related trial/order items and are not independent confirmation of demand.

I distinguish four kinds of measurement in interpreting the results. Eligibility answers define the recorded screening decision. Concern and benefit items describe individual judgments. Intention items describe conditional expectations over the next 30 days. Discount, access and support items describe stated conditions or selections. I do not combine these families into a total score, interpret category intervals as equal, or treat the buyer and business items as interchangeable measures. A lower count for repeated-use intention than for trial is a descriptive contrast between answers; it is not an observed rate of participant attrition.

The absence of a documented pretest limits confidence that respondents understood each prompt as intended. I therefore give the original wording, response options and item-specific denominators, identify combined or ambiguous judgments, and restrict interpretation to what each question asks. A future round should examine understanding before collection and separate the combined judgments into distinct questions. Such work would improve a new instrument; it would not retrospectively validate these responses.

C. Record selection and analysis

I applied the inclusion rules recorded on 14 October 2026 and retained 49 buyer questionnaires and 51 business questionnaires. Of the 92 buyer records in the saved sheet, I excluded nine that failed the recorded eligibility screen and 34 whose original response source was unconfirmed. None of those 34 records contributes to the reported counts, percentages or sensitivity analysis. Verification of the sources for the retained records is a separate, unfinished check. Appendix C, Table C1, accounts for all 143 records before screening. I analyzed the 19 initial and 30 additional buyer questionnaires separately, alongside the 41 initial and 10 additional business questionnaires. Combined totals describe the retained records; I did not weight them to represent Hanoi’s population.

I checked response labels, selection limits, identical complete answer sets and repeated comments. I found no identical complete answer sets among the retained records. I also calculated a sensitivity analysis using 45

buyer questionnaires; Appendix C explains the four additional omissions and reports their numerical effect. I retained the same 51 business questionnaires in every analysis.

For each five-category item, I divided the number selecting categories 4–5 by the number selecting any of categories 1–5. I excluded "unsure," declined and blank answers from that denominator and reported their counts separately. For example, U26 has 48 substantive buyer answers: 19 initial and 29 additional. The remaining additional buyer selected "unsure." I used all questionnaires in the relevant batch as the denominator for multiple-selection items. I did not impute missing answers or fit explanatory models. Appendix B gives the full rating distributions, and the accompanying CSV contains every closed-item frequency.

For the discount questions, I retained "would not participate at any discount" as a substantive answer. I also reported a separate numerical-only denominator: 46 buyers and 47 businesses. U32 asks the lowest discount at which a buyer would consider purchasing; R10 asks the highest discount a business could consider. These are different judgments about unspecified offers, so I analyzed their distributions separately.

I report selected 95% Wilson binomial intervals in Supplement E. They illustrate uncertainty under an independent-observation binomial model. They do not account for convenience recruitment, shared household or outlet ownership, transcription errors or unresolved source checks. I did not use them to test batch differences or estimate a population margin of error.

I report ten additional context items in Supplement D. I did not conduct a qualitative analysis of U31 or R26 because I have not established, for each comment, whether it preserves the participant's words or summarizes them. I report no comment themes or quotations.

D. Recorded consent and researcher role

All 49 retained buyer records and all 51 retained business records contain affirmative consent and adult-status answers. For direct form submissions, these cells record the submitted selections. For responses entered on a participant's behalf, they record the transcribed selections. I have not completed the comparison of those transcribed consent answers with the original messages or notes.

I omitted direct contact questions from the instruments, but my recruitment messages and response links can identify participants. I therefore treat the research records as identifiable. I am also developing Còn Ngon and conducted the recruitment, including invitations that mentioned possible business cooperation.

E. Adviser review, data access and retention

I received a completed adviser review of this study from Mr Kien, my mentor at Ngôi Sao Hoàng Mai School. He also guided the development of my questionnaires and initial manuscript. I did not obtain review from an institutional ethics committee; Mr Kien's review was adviser oversight.

I store the three study spreadsheets in Google Drive with access restricted to my owner account. I checked those permissions on 15 and 16 October 2026. The files previously allowed access through their links. I do not know when that access began or whether anyone outside the project opened the files. I recorded the available permission history separately. As of 16 October, I had not enabled two-factor authentication or separated the contact-to-response links from the questionnaire answers. I share only aggregate research results in the accompanying materials.

I adopted a retention and withdrawal policy on 15 October 2026 and informed participants of the 30 November 2026 withdrawal deadline. Participants can request withdrawal through minhlamdang789@gmail.com while I can still identify their contribution. On 30 November 2026, I will process requests received before deletion, then delete identifiable recruitment records, contact links and individual questionnaire records. I will retain only deidentified aggregate results.

RESULTS

A. Sample characteristics

Table 1. Questionnaires included in the analysis

Respondent group	Initial batch	Additional batch	Total retained
Prospective buyers	19	30	49
Food businesses	41	10	51

Table 2a. Buyer characteristics

Item / selected response	Initial	Additional	Combined, descriptive only
Age 18–24 (U05)	2/19 (10.5%)	10/30 (33.3%)	12/49 (24.5%)
Age 25–34 (U05)	8/19 (42.1%)	6/30 (20.0%)	14/49 (28.6%)
Age 35–44 (U05)	3/19 (15.8%)	6/30 (20.0%)	9/49 (18.4%)
Age 45–59 (U05)	4/19 (21.1%)	6/30 (20.0%)	10/49 (20.4%)
Age 60 or older (U05)	2/19 (10.5%)	2/30 (6.7%)	4/49 (8.2%)
Women (U06)	9/19 (47.4%)	25/30 (83.3%)	34/49 (69.4%)
Salaried work (U07)	13/19 (68.4%)	6/30 (20.0%)	19/49 (38.8%)
Student (U07)	0/19 (0.0%)	5/30 (16.7%)	5/49 (10.2%)
Own smartphone (U10)	19/19 (100.0%)	22/30 (73.3%)	41/49 (83.7%)
Shared / borrowed smartphone (U10)	0/19 (0.0%)	6/30 (20.0%)	6/49 (12.2%)
No usable device (U10)	0/19 (0.0%)	2/30 (6.7%)	2/49 (4.1%)
Can order independently (U12)	15/19 (78.9%)	21/30 (70.0%)	36/49 (73.5%)
Needs help (U12)	4/19 (21.1%)	7/30 (23.3%)	11/49 (22.4%)
Cannot yet order even with help (U12)	0/19 (0.0%)	2/30 (6.7%)	2/49 (4.1%)

Table 2b. Business characteristics

Item / selected response	Initial	Additional	Combined, descriptive only
Restaurant / eating place (R04)	17/41 (41.5%)	10/10 (100.0%)	27/51 (52.9%)
Bakery (R04)	8/41 (19.5%)	0/10 (0.0%)	8/51 (15.7%)
Café selling food (R04)	8/41 (19.5%)	0/10 (0.0%)	8/51 (15.7%)
Canteen (R04)	8/41 (19.5%)	0/10 (0.0%)	8/51 (15.7%)
At most ten staff (R05)	25/41 (61.0%)	10/10 (100.0%)	35/51 (68.6%)
Unsold food on at least one day in past week (R06)	39/41 (95.1%)	9/10 (90.0%)	48/51 (94.1%)

I retained buyer questionnaires from all five adult age categories. Five of 49 buyers (10.2%) selected student as their main work status. Forty-one owned a smartphone, six used a shared or borrowed device, and two had no usable device. Eleven reported needing help to order and two reported being unable to order even with help. Of the 51 business questionnaires, 27 described restaurants or eating places, eight bakeries, eight cafés selling food and eight canteens. I therefore use “food businesses” for this group.

Table 2c. Recorded comprehension answers (U14/R09), divided by all entries in each batch

Recorded answer	Buyers: initial	Buyers: additional	Businesses: initial	Businesses: additional
Unsold food not served to customers	19/19 (100.0%)	29/30 (96.7%)	40/41 (97.6%)	10/10 (100.0%)

Recorded answer	Buyers: initial	Buyers: additional	Businesses: initial	Businesses: additional
Food partly eaten by customers	0/19 (0.0%)	0/30 (0.0%)	0/41 (0.0%)	0/10 (0.0%)
Both types	0/19 (0.0%)	0/30 (0.0%)	0/41 (0.0%)	0/10 (0.0%)
Unsure	0/19 (0.0%)	1/30 (3.3%)	1/41 (2.4%)	0/10 (0.0%)
Declined	0/19 (0.0%)	0/30 (0.0%)	0/41 (0.0%)	0/10 (0.0%)
Blank	0/19 (0.0%)	0/30 (0.0%)	0/41 (0.0%)	0/10 (0.0%)

I recorded the intended unsold-food answer in 19/19 initial buyer questionnaires, 29/30 additional buyer questionnaires, 40/41 initial business questionnaires and 10/10 additional business questionnaires. One additional buyer and one initial business selected "unsure." No respondent selected partly eaten food or both types. I retained both unsure responses. U14/R09 checks this one distinction; it does not measure understanding of every later question.

Table 2d. Current surplus-handling practices (R07), each divided by all business entries in the batch

Item / selected response	Initial	Additional	Combined, descriptive only
Discount sales (R07)	17/41 (41.5%)	5/10 (50.0%)	22/51 (43.1%)
Staff consumption (R07)	25/41 (61.0%)	8/10 (80.0%)	33/51 (64.7%)
Giving / donation (R07)	18/41 (43.9%)	5/10 (50.0%)	23/51 (45.1%)
Disposal (R07)	17/41 (41.5%)	4/10 (40.0%)	21/51 (41.2%)
Other method (R07)	0/41 (0.0%)	0/10 (0.0%)	0/51 (0.0%)
No surplus (R07)	2/41 (4.9%)	1/10 (10.0%)	3/51 (5.9%)

For R07, I recorded staff consumption in 33/51 business questionnaires (64.7%), giving or donation in 23/51 (45.1%), discount sales in 22/51 (43.1%) and disposal in 21/51 (41.2%). Three businesses reported no surplus. No business selected uncertainty or refusal, and none left the item blank. Because R07 permits multiple selections, the categories overlap. I asked about practices during the previous seven days and did not measure the quantity of food handled through each route. Supplement D reports household size, income, internet access, previous app use, collection windows, business handover preferences and food types.

B. Concerns and expected benefits

Table 3a. Buyer concerns: categories 4–5 / substantive responses

Item	Initial	Additional	Combined, descriptive only
Food hygiene (U18)	2/19 (10.5%)	20/30 (66.7%)	22/49 (44.9%)
Negative social judgment (U19)	1/15 (6.7%)	2/23 (8.7%)	3/38 (7.9%)
Privacy (U20)	2/19 (10.5%)	12/30 (40.0%)	14/49 (28.6%)
Collection effort (U21)	3/19 (15.8%)	11/30 (36.7%)	14/49 (28.6%)
Expected app difficulty (U22)	5/19 (26.3%)	8/30 (26.7%)	13/49 (26.5%)

Table 3b. Business concerns: categories 4–5 / substantive responses

Item	Initial	Additional	Combined,descriptive only
Hygiene before handover (R14)	31/41 (75.6%)	9/10 (90.0%)	40/51 (78.4%)
Reputation (R15)	18/41 (43.9%)	5/10 (50.0%)	23/51 (45.1%)
Additional workload (R16)	13/41 (31.7%)	7/10 (70.0%)	20/51 (39.2%)
Missed collections (R17)	32/41 (78.0%)	9/10 (90.0%)	41/51 (80.4%)
Expected listing-interface difficulty (R18)	11/41 (26.8%)	5/10 (50.0%)	16/51 (31.4%)

Table 4a. Buyer agreement: categories 4–5 / substantive responses

Item	Initial	Additional	Combined, descriptive only
Savings after collection costs: combined judgment (U23)	18/19 (94.7%)	23/29 (79.3%)	41/48 (85.4%)
Waste-reduction reason (U25)	17/19 (89.5%)	28/30 (93.3%)	45/49 (91.8%)

Table 4b. Business agreement: categories 4–5 / substantive responses

Item	Initial	Additional	Combined, descriptive only
Returns cover time and costs: combined judgment (R19)	11/40 (27.5%)	5/9 (55.6%)	16/49 (32.7%)
Helping buyers access lower-cost food (R20)	14/41 (34.1%)	9/10 (90.0%)	23/51 (45.1%)
Waste-reduction reason (R21)	27/41 (65.9%)	10/10 (100.0%)	37/51 (72.5%)

I found category 4–5 hygiene concern in 2/19 initial buyer answers (10.5%) and 20/30 additional buyer answers (66.7%). Among businesses, the corresponding counts were 31/41 initially (75.6%) and 9/10 additionally (90.0%); missed-collection concern was 32/41 (78.0%) and 9/10 (90.0%). For negative social judgment, 3/38 substantive buyer answers (7.9%) selected categories 4–5, while 10/49 buyers (20.4%) declined and 1/49 (2.0%) was unsure. I cannot infer the concern level of those who declined from the 38 substantive answers. Appendix B includes the middle categories and all nonresponse counts.

C. Conditional intentions

Table 5a. Buyer intentions: categories 4–5 / substantive responses

Item	Initial	Additional	Combined, descriptive only
Trial (U26)	17/19 (89.5%)	15/29 (51.7%)	32/48 (66.7%)
At least one order (U27)	13/19 (68.4%)	10/29 (34.5%)	23/48 (47.9%)
Repeated use (U28)	5/19 (26.3%)	4/29 (13.8%)	9/48 (18.8%)

Table 5b. Business intentions: categories 4–5 / substantive responses

Item	Initial	Additional	Combined, descriptive only
Trial (R22)	19/40 (47.5%)	5/9 (55.6%)	24/49 (49.0%)
At least one listing (R23)	15/40 (37.5%)	4/10 (40.0%)	19/50 (38.0%)
Repeated use (R24)	6/40 (15.0%)	2/10 (20.0%)	8/50 (16.0%)

I found fewer category 4–5 answers for repeated use than for trial in both buyer batches: 5/19 versus 17/19 initially, and 4/29 versus 15/29 additionally. For repeated use, 21/48 substantive buyer answers (43.8%) selected the midpoint and 9/48 (18.8%) selected categories 4–5. Business repeated-use answers in categories 4–5 were 6/40 initially (15.0%) and 2/10 additionally (20.0%), compared with trial counts of 19/40 (47.5%) and 5/9 (55.6%). The item denominators differ because uncertainty is recorded separately for each question.

D. Discount consideration bands

Table 6a. Buyer stated minimum discount for consideration: substantive denominators include nonparticipation

Item / selected response	Initial	Additional	Combined, descriptive only
0% (U32)	0/19 (0.0%)	0/29 (0.0%)	0/48 (0.0%)
1–19% (U32)	0/19 (0.0%)	2/29 (6.9%)	2/48 (4.2%)

20–39% (U32)	6/19 (31.6%)	15/29 (51.7%)	21/48 (43.8%)
40–59% (U32)	6/19 (31.6%)	9/29 (31.0%)	15/48 (31.2%)
60% or more (U32)	7/19 (36.8%)	1/29 (3.4%)	8/48 (16.7%)
Would not participate at any discount (U32)	0/19 (0.0%)	2/29 (6.9%)	2/48 (4.2%)

Would not participate at any discount (U32) 0/19 (0.0%) 2/29 (6.9%) 2/48 (4.2%)

Table 6b. Business stated maximum discount for consideration: substantive denominators include nonparticipation

Item / selected response	Initial	Additional	Combined, descriptive only
0% (R10)	4/40 (10.0%)	0/9 (0.0%)	4/49 (8.2%)
1–19% (R10)	7/40 (17.5%)	1/9 (11.1%)	8/49 (16.3%)
20–39% (R10)	15/40 (37.5%)	5/9 (55.6%)	20/49 (40.8%)
40–59% (R10)	10/40 (25.0%)	2/9 (22.2%)	12/49 (24.5%)
60% or more (R10)	3/40 (7.5%)	0/9 (0.0%)	3/49 (6.1%)
Would not participate at any discount (R10)	1/40 (2.5%)	1/9 (11.1%)	2/49 (4.1%)

One buyer and two businesses were unsure. Two buyers would not buy at any discount and two businesses would not sell through the app. There are consequently 46 numerical buyer thresholds and 47 numerical business thresholds.

Table 7. Cumulative numerical consideration bands, with nonparticipation and uncertainty excluded

Threshold	Buyer consideration: initial	Buyer consideration: additional	Business consideration: initial	Business consideration: additional
At least 20%	19/19 (100.0%)	25/27 (92.6%)	28/39 (71.8%)	7/8 (87.5%)
At least 40%	13/19 (68.4%)	10/27 (37.0%)	13/39 (33.3%)	2/8 (25.0%)
At least 60%	7/19 (36.8%)	1/27 (3.7%)	3/39 (7.7%)	0/8 (0.0%)

Among numerical answers, 23/46 buyers (50.0%) selected a consideration band of at least 40%, compared with 15/47 businesses (31.9%). Including substantive nonparticipation gives 23/48 (47.9%) and 15/49 (30.6%). For the additional buyers selecting at least 60%, the numerical-only result is 1/27 (3.7%); the denominator including the two nonparticipating answers gives 1/29 (3.4%). These are summaries of different questions and groups. They do not establish that offers would satisfy, or fail to satisfy, particular buyers.

The two central numerical buyer answers lie in different categories, 20–39% and 40–59%; a single buyer median category is therefore not uniquely identified. The central business answer lies in 20–39%. Explicit nonparticipation is not ranked as a numerical discount.

E. Collection conditions and support priorities

Table 8a. Buyer collection arrangements

Item / selected response	Initial	Additional	Combined, descriptive only
Maximum journey 1–10 minutes (U16)	11/19 (57.9%)	16/30 (53.3%)	27/49 (55.1%)
Maximum journey 11–20 minutes (U16)	6/19 (31.6%)	11/30 (36.7%)	17/49 (34.7%)

Maximum journey 21–30 minutes (U16)	2/19 (10.5%)	1/30 (3.3%)	3/49 (6.1%)
Cannot collect personally (U16)	0/19 (0.0%)	2/30 (6.7%)	2/49 (4.1%)
Self-collection (U17)	14/19 (73.7%)	16/30 (53.3%)	30/49 (61.2%)
Proxy collection (U17)	0/19 (0.0%)	6/30 (20.0%)	6/49 (12.2%)
Either self or proxy (U17)	4/19 (21.1%)	6/30 (20.0%)	10/49 (20.4%)
Delivery only (U17)	1/19 (5.3%)	2/30 (6.7%)	3/49 (6.1%)

Table 8b. Business time available for listing

Item / selected response	Initial	Additional	Combined, descriptive only
1–5 minutes available per listing (R12)	16/41 (39.0%)	6/10 (60.0%)	22/51 (43.1%)
6–10 minutes available (R12)	19/41 (46.3%)	3/10 (30.0%)	22/51 (43.1%)
11–20 minutes available (R12)	5/41 (12.2%)	0/10 (0.0%)	5/51 (9.8%)
No time available (R12)	1/41 (2.4%)	1/10 (10.0%)	2/51 (3.9%)

Table 9a. Buyer support selections, each divided by all respondents in the batch

Item / selected response	Initial	Additional	Combined, descriptive only
Food / preparation / storage information (U29)	4/19 (21.1%)	17/30 (56.7%)	21/49 (42.9%)
Ingredients / allergens (U29)	4/19 (21.1%)	4/30 (13.3%)	8/49 (16.3%)
Clear price and discount (U29)	17/19 (89.5%)	22/30 (73.3%)	39/49 (79.6%)
Clear pickup time and place (U29)	16/19 (84.2%)	19/30 (63.3%)	35/49 (71.4%)
Confirmation-code guidance (U29)	0/19 (0.0%)	5/30 (16.7%)	5/49 (10.2%)
Discreet pickup and privacy (U29)	4/19 (21.1%)	2/30 (6.7%)	6/49 (12.2%)
Ordering assistance (U29)	5/19 (26.3%)	8/30 (26.7%)	13/49 (26.5%)
Complaint route (U29)	5/19 (26.3%)	7/30 (23.3%)	12/49 (24.5%)

Table 9b. Business support selections, each divided by all respondents in the batch

Item / selected response	Initial	Additional	Combined, descriptive only
Listing template (R25)	12/41 (29.3%)	8/10 (80.0%)	20/51 (39.2%)
Food and storage guidance (R25)	32/41 (78.0%)	5/10 (50.0%)	37/51 (72.5%)
Clear collection windows (R25)	13/41 (31.7%)	7/10 (70.0%)	20/51 (39.2%)
Reminders and no-show procedure (R25)	31/41 (75.6%)	6/10 (60.0%)	37/51 (72.5%)
Confirmation-code guidance (R25)	12/41 (29.3%)	1/10 (10.0%)	13/51 (25.5%)
Proxy collection procedure (R25)	4/41 (9.8%)	1/10 (10.0%)	5/51 (9.8%)
Contact privacy (R25)	5/41 (12.2%)	0/10 (0.0%)	5/51 (9.8%)
Complaint process (R25)	14/41 (34.1%)	2/10 (20.0%)	16/51 (31.4%)

I allowed up to three support selections per questionnaire. Clear price and discount information was selected by 39/49 buyers (79.6%), and clear pickup time and place by 35/49 (71.4%). Among businesses, food and storage guidance and a missed-collection procedure were each selected by 37/51 (72.5%). I report the batch-specific counts in Tables 9a–9b. Because each respondent could select more than one option, the percentages can sum to more than 100%.

DISCUSSION

A. Conditional intentions and batch differences

I found a consistent distinction between trying the service and using it repeatedly. Among buyers, the category 4–5 count fell from 17/19 for trial to 5/19 for repeated use in the initial batch, and from 15/29 to 4/29 in the additional batch. This supports evaluating first use and continued use as separate outcomes. I interpret these answers as conditional expectations because the questions assume suitable food, prices and app operation. The distinction between intention and action also follows the evidence reviewed by Sheeran and Webb [5].

The buyer batches differ in composition as well as answers. Women account for 9/19 initial buyers (47.4%) and 25/30 additional buyers (83.3%); salaried workers account for 13/19 (68.4%) and 6/30 (20.0%). All 19 initial buyers owned a smartphone, compared with 22/30 additional buyers (73.3%). I cannot isolate the effects of recruitment, respondent characteristics or administration from these descriptive comparisons. I therefore retain separate batch results throughout the paper.

Agreement with waste reduction as a reason to participate was 17/19 initially and 28/30 additionally among buyers, and 27/41 and 10/10 among businesses. By contrast, agreement that business returns could cover time and costs was 11/40 initially and 5/9 additionally. I interpret these as answers to separate judgments, not as a ranking of causal motives. The economic emphasis in the Barcelona interviews and the operational issues examined in the Japanese platform study provide context for testing those judgments through specific offers and observed tasks [2]; [3].

These results address the three research questions at different levels. The intention distributions identify a distinction to examine between first use and continued use. The concern distributions identify reported problems surrounding food and collection. Discount bands, access answers and support selections specify conditions to test with concrete offers. This is a descriptive contribution to the design of a local feasibility study. I have not tested whether any concern predicts intention, whether intention predicts behavior, or whether a proposed feature changes either outcome. The results consequently generate questions for a prototype study rather than estimates of its likely success.

B. Implications for a prototype study

I would test discount preferences with an actual payable price, usual price, portion, travel cost and collection window presented together. In this questionnaire, 23/46 numerical buyer answers (50.0%) specified a minimum consideration band of at least 40%, while 15/47 business answers (31.9%) specified a maximum band of at least 40%. These different questions do not establish which buyers would accept a particular business offer. A prototype study would need to observe those choices directly.

I would also distinguish food sold through the service from food otherwise destined for disposal. In the business questionnaires, staff consumption was reported by 33/51 and giving or donation by 23/51, alongside disposal by 21/51. Selling a portion that would have been eaten by staff does not itself establish waste prevention. I would record listings, orders, completed handovers and subsequent consumption or disposal separately. The Norwegian pilot's reports of unsuitable quantities and collection difficulties support observing those stages, while its six compensated students and industry-initiated design limit direct comparison with my sample [4].

I would prioritize tests of price and pickup information for buyers, selected by 39/49 and 35/49 respectively, and food/storage guidance and missed-collection procedures for businesses, each selected by 37/51. I would measure whether users can interpret an offer, create a listing and complete a handover. Some support options combine several features, so I cannot identify which component caused a selection. I would assess food-handling procedures separately using relevant guidance; WHO's general manual does not certify the safety of an individual offer [8].

C. Limitations

I recruited a convenience sample while developing the proposed service. I do not have a complete invitation count, verified response-mode totals or a quantified measure of shared outlet ownership. I therefore cannot estimate a response rate, isolate a mode effect or treat the sample as representative of Hanoi. I applied the inclusion rules after collection had begun. The four additional omissions in the buyer sensitivity analysis reduce the pooled trial count from 32/48 to 28/44 and the count selecting a minimum discount of at least 60% from 8/48 to 4/44; Appendix C reports both versions.

I retain the original chat records and in-person notes, but I have not completed a documented comparison of every retained questionnaire with its original answers, consent and household or outlet identity. I have logged all 143 timestamp differences but have not linked each corrected date to an original record. Consequently, I report the questionnaire-sheet results without claiming that I have completed that source audit. I have also not assembled the historical information text by collection mode for comparison with U14/R09, or established the verbatim status of every open comment.

My questionnaires have no documented cognitive pretest or validated scale adaptation. R16, R19 and U23 combine judgments; several U29 options combine features; U24 does not define the expected obligation to reciprocate. Ten of 49 buyers declined U19, limiting interpretation of its 3/38 category 4–5 result. My personal contact with participants, positive benefit wording and invitations mentioning cooperation could affect responses, but I did not measure those effects. Question-design and administration biases are established methodological concerns [9].

I measured reported expectations and practices, not subsequent transactions. I did not observe purchases, repeated use, business returns, food-safety outcomes or food waste quantities. The later withdrawal notice also does not establish which information each participant received at initial recruitment.

Small, unequal batches also limit comparisons even if every source record is subsequently verified. Changes in recruitment, response mode or participant composition could account for apparent batch differences, and this study cannot separate those explanations. Source reconciliation can establish which records support the analysis; it cannot make convenience recruitment representative, supply a missing pretest, or create observations of actual use.

CONCLUSION

I analyzed 49 buyer and 51 food-business questionnaires to identify issues for testing Còn Ngon. In both buyer batches, fewer respondents selected categories 4–5 for repeated use than for trial. Business concerns centered on missed collections and hygiene before handover, with category 4–5 counts of 41/51 and 40/51 respectively. These recorded patterns identify clear offer information, reliable collection and continued use as priorities for a prototype study, subject to completion of the original-source checks. I would evaluate affordability and business participation using specific offers and observed transactions; the present questionnaire does not establish adoption or waste reduction.

DECLARATIONS

Researcher role: I am developing Còn Ngon and conducted the recruitment. This involvement is relevant to interpreting the responses.

Data availability: I provide the questionnaire wording, full rating distributions, screening flow and sensitivity analysis in Appendices A–C. Supplement D (Supplement_D_context.html) contains ten context items, and Supplement E (Supplement_E_intervals.html) contains selected illustrative intervals. I also provide aggregate counts, full closed-item frequencies, discount summaries and a Python script that reproduces the calculations. I retain individual source records privately under the policy in Section II.E.

Instrument development and writing: I developed the original questionnaires and manuscript with guidance from my school mentor, Mr Kien. I subsequently used OpenAI Codex for manuscript drafting and revision, literature retrieval, and analysis-code development and execution. I used automated checks against the fixed response snapshot and aggregate counts; I have not independently rerun the code outside the assistant environment. I am responsible for the research records, interpretation and manuscript. Mr Kien also completed an adviser review of the study, as described in Section II.E.

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APPENDIX A. ORIGINAL VIETNAMESE INSTRUMENTS

I transcribed the instruments from the Câu hỏi tab of the planning workbook and checked the prompts against the response-sheet headers. I took the response options and planned required-field labels from that tab. These labels describe the planning record; I have not verified historical form routing or required-field settings. The English labels are explanatory translations, not validated adaptations.

U00

U00 Anh/chị đã đọc hoặc được đọc phần thông tin nghiên cứu và đồng ý tham gia tự nguyện?

Response type: Chọn một. Required status in planning dictionary: Có.

Options: Có; Không; Chưa biết / không rõ; Không muốn trả lời

U01

U01 Anh/chị từ 18 tuổi trở lên?

Response type: Chọn một. Required status in planning dictionary: Có.

Options: Có; Không; Chưa biết / không rõ; Không muốn trả lời

U02

U02 Anh/chị hiện sống hoặc làm việc tại Hà Nội?

Response type: Chọn một. Required status in planning dictionary: Có.

Options: Có; Không; Chưa biết / không rõ; Không muốn trả lời

U03

U03 Trong 3 tháng vừa qua, anh/chị hoặc hộ gia đình có gặp khó khăn trong việc trang trải chi phí ăn uống không?

Response type: Chọn một. Required status in planning dictionary: Có.

Options: Không bao giờ; Thỉnh thoảng; Thường xuyên; Chưa biết / không rõ; Không muốn trả lời

U04

U04 Có người khác trong hộ gia đình đã trả lời khảo sát Food Rescue này chưa?

Response type: Chọn một. Required status in planning dictionary: Có.

Options: Có; Không; Chưa biết / không rõ; Không muốn trả lời

U05

U05 Anh/chị thuộc nhóm tuổi nào?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: 18–24; 25–34; 35–44; 45–59; Từ 60 tuổi; Chưa biết / không rõ; Không muốn trả lời

U06

U06 Anh/chị mô tả giới tính của mình như thế nào?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Nữ; Nam; Cách mô tả khác; Chưa biết / không rõ; Không muốn trả lời

U07

U07 Tình trạng công việc chính hiện nay của anh/chị là gì?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Làm công hưởng lương; Tự kinh doanh; Lao động thời vụ / tự do; Học sinh / sinh viên từ 18 tuổi; Hiện không làm việc; Đã nghỉ hưu; Khác; Chưa biết / không rõ; Không muốn trả lời

U08

U08 Có bao nhiêu người thường cùng chia sẻ chi phí sinh hoạt trong hộ của anh/chị, tính cả anh/chị?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: 1; 2; 3; 4; Từ 5 người; Chưa biết / không rõ; Không muốn trả lời

U09

U09 Nếu thoải mái chia sẻ, thu nhập trung bình mỗi tháng của hộ, chia cho số người trong hộ, gần với khoảng nào?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Dưới 2 triệu đồng / người; Từ 2 đến dưới 4 triệu; Từ 4 đến dưới 6 triệu; Từ 6 triệu trở lên; Chưa biết / không rõ; Không muốn trả lời

U10

U10 Anh/chị có thể sử dụng điện thoại thông minh theo cách nào?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Có điện thoại riêng; Mượn hoặc dùng chung; Không có thiết bị có thể dùng; Chưa biết / không rõ; Không muốn trả lời

U11

U11 Anh/chị thường có thể truy cập internet trên điện thoại ở mức nào?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hầu như mỗi ngày; Một số ngày; Hiếm khi; Không thể truy cập; Chưa biết / không rõ; Không muốn trả lời

U12

U12 Nếu muốn đặt một món bằng điện thoại, anh/chị thường cần mức hỗ trợ nào?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Tự thực hiện được; Cần người hỗ trợ; Chưa thể thực hiện ngay cả khi có hỗ trợ; Chưa biết / không rõ; Không muốn trả lời

U13

U13 Trước hôm nay, anh/chị có trải nghiệm nào với ứng dụng đặt đồ ăn?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Chưa từng dùng; Đã dùng đặt đồ ăn thông thường, chưa dùng ứng dụng thực phẩm dư; Đã dùng ứng dụng hoặc dịch vụ trực tuyến bán / chia sẻ thực phẩm dư; Chưa biết / không rõ; Không muốn trả lời

U14

U14 Theo mô tả vừa đọc, Food Rescue trong khảo sát này chủ yếu kết nối loại đồ ăn nào?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Món chưa bán và chưa phục vụ khách; Thức ăn khách đã dùng dở; Cả hai loại; Chưa biết / không rõ; Không muốn trả lời

U15

U15 Những khung giờ nào anh/chị thường có thể đến lấy đồ ăn? (Chọn nhiều; chọn riêng Không có / Chưa biết / Không muốn trả lời.)

Response type: Chọn nhiều. Required status in planning dictionary: Không.

Options: Trước 11 giờ; 11 đến trước 14 giờ; 14 đến trước 17 giờ; 17 đến trước 20 giờ; Từ 20 giờ trở đi; Không có khung giờ phù hợp; Chưa biết / không rõ; Không muốn trả lời

U16

U16 Anh/chị thường có thể dành tối đa bao nhiêu phút cho một chiều đi lấy món?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Không thể tự đi lấy; 1–10 phút; 11–20 phút; 21–30 phút; Trên 30 phút; Chưa biết / không rõ; Không muốn trả lời

U17

U17 Nếu được lựa chọn, hình thức nhận món nào phù hợp nhất với anh/chị?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Tự đến lấy; Nhờ người khác đến lấy; Cả hai đều phù hợp; Chỉ phù hợp nếu được giao đến nơi; Chưa biết / không rõ; Không muốn trả lời

U18

U18 Anh/chị lo ngại đến mức nào về vệ sinh của món ăn chưa bán khi nhận qua ứng dụng?

English gloss: Concern about hygiene of unsold food received through the app.

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hoàn toàn không lo ngại; Ít lo ngại; Lo ngại ở mức vừa; Khá lo ngại; Rất lo ngại; Chưa biết / không rõ; Không muốn trả lời

U19

U19 Anh/chị lo ngại đến mức nào rằng người khác sẽ đánh giá mình không tốt vì mua món ăn chưa bán với giá giảm?

English gloss: Concern about negative social judgment for buying discounted unsold food.

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hoàn toàn không lo ngại; Ít lo ngại; Lo ngại ở mức vừa; Khá lo ngại; Rất lo ngại; Chưa biết / không rõ; Không muốn trả lời

U20

U20 Anh/chị lo ngại đến mức nào về việc thông tin cá nhân của mình bị tiết lộ khi sử dụng dịch vụ?

English gloss: Concern about disclosure of personal information.

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hoàn toàn không lo ngại; Ít lo ngại; Lo ngại ở mức vừa; Khá lo ngại; Rất lo ngại; Chưa biết / không rõ; Không muốn trả lời

U21

U21 Anh/chị lo ngại đến mức nào rằng việc đi lấy món sẽ tốn quá nhiều công sức?

English gloss: Concern about excessive collection effort.

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hoàn toàn không lo ngại; Ít lo ngại; Lo ngại ở mức vừa; Khá lo ngại; Rất lo ngại; Chưa biết / không rõ; Không muốn trả lời

U22

U22 Anh/chị lo ngại đến mức nào về khó khăn khi thao tác trên ứng dụng?

English gloss: Concern about difficulty operating the app.

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hoàn toàn không lo ngại; Ít lo ngại; Lo ngại ở mức vừa; Khá lo ngại; Rất lo ngại; Chưa biết / không rõ; Không muốn trả lời

U23

U23 Mua món chưa bán qua ứng dụng có thể giúp tôi tiết kiệm chi phí ăn uống, sau khi tính cả chi phí đi lấy.

English gloss: Expected food-cost savings after collection costs.

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hoàn toàn không đồng ý; Không đồng ý; Không đồng ý cũng không phản đối; Đồng ý; Hoàn toàn đồng ý; Chưa biết / không rõ; Không muốn trả lời

U24

U24 Anh/chị lo ngại đến mức nào rằng mua món giá giảm theo cách này khiến mình có nghĩa vụ phải làm điều gì đó đáp lại?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hoàn toàn không lo ngại; Ít lo ngại; Lo ngại ở mức vừa; Khá lo ngại; Rất lo ngại; Chưa biết / không rõ; Không muốn trả lời

U25

U25 Giảm lãng phí thực phẩm là một lý do khiến tôi cân nhắc sử dụng dịch vụ này.

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hoàn toàn không đồng ý; Không đồng ý; Không đồng ý cũng không phản đối; Đồng ý; Hoàn toàn đồng ý; Chưa biết / không rõ; Không muốn trả lời

U26

U26 Nếu có món và giá phù hợp, ứng dụng hoạt động như mô tả, anh/chị có khả năng thử sử dụng trong 30 ngày tới không?

English gloss: Conditional likelihood of trying the service within 30 days.

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Chắc chắn không; Có lẽ không; Chưa nghiêng về có hay không; Có lẽ có; Chắc chắn có; Chưa biết / không rõ; Không muốn trả lời

U27

U27 Trong điều kiện trên, anh/chị có khả năng đặt ít nhất một món trong 30 ngày tới không?

English gloss: Conditional likelihood of ordering at least one item within 30 days.

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Chắc chắn không; Có lẽ không; Chưa nghiêng về có hay không; Có lẽ có; Chắc chắn có; Chưa biết / không rõ; Không muốn trả lời

U28

U28 Nếu tiếp tục có món và giá phù hợp, anh/chị có khả năng sử dụng nhiều lần trong 30 ngày tới không?

English gloss: Conditional likelihood of repeated use within 30 days.

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Chắc chắn không; Có lẽ không; Chưa nghiêng về có hay không; Có lẽ có; Chắc chắn có; Chưa biết / không rõ; Không muốn trả lời

U29

U29 Ba thông tin hoặc hỗ trợ nào hữu ích nhất khi anh/chị quyết định đặt món? (Tối đa 3; chọn riêng Không cần / Chưa biết / Không muốn trả lời.)

Response type: Chọn nhiều. Required status in planning dictionary: Không.

Options: Thông tin món và thời điểm chuẩn bị / cách bảo quản; Thành phần và thông tin chất gây dị ứng; Giá phải trả và mức giảm rõ ràng; Giờ và địa điểm lấy rõ ràng; Hướng dẫn mã xác nhận dễ hiểu; Nhận món kín đáo và bảo vệ thông tin cá nhân; Có người hỗ trợ đặt món; Có cách phản ánh khi món không đúng mô tả; Không cần hỗ trợ trong danh sách; Chưa biết / không rõ; Không muốn trả lời

U30

U30 Anh/chị có thể cân nhắc những loại thực phẩm chưa bán nào nếu món, giá và thông tin phù hợp? (Chọn nhiều; chọn riêng Không có / Chưa biết / Không muốn trả lời.)

Response type: Chọn nhiều. Required status in planning dictionary: Không.

Options: Món ăn hoặc suất ăn đã chế biến; Bánh mì hoặc bánh nướng; Rau củ quả chưa chế biến; Thực phẩm đóng gói; Loại khác; Không có loại phù hợp; Chưa biết / không rõ; Không muốn trả lời

U31

U31 Điều gì khiến anh/chị còn do dự nhất, hoặc cần thay đổi điều gì trước khi sử dụng? (Không bắt buộc; xin không ghi tên, số điện thoại hoặc địa chỉ cụ thể.)

Response type: Câu mở. Required status in planning dictionary: Không.

U32

U32 So với giá bán thông thường của cùng món đó, mức giảm thấp nhất nào khiến anh/chị bắt đầu cân nhắc mua qua dịch vụ này?

English gloss: Minimum discount that would prompt consideration of purchase.

Response type: Chọn một. Required status in planning dictionary: Không.

Options: 0% — không giảm giá; 1–19%; 20–39%; 40–59%; Từ 60% trở lên; Không cân nhắc mua dù giảm giá; Chưa biết / không rõ; Không muốn trả lời

R00

R00 Anh/chị đã đọc hoặc được đọc phần thông tin nghiên cứu và đồng ý tham gia tự nguyện?

Response type: Chọn một. Required status in planning dictionary: Có.

Options: Có; Không; Chưa biết / không rõ; Không muốn trả lời

R01

R01 Anh/chị từ 18 tuổi trở lên?

Response type: Chọn một. Required status in planning dictionary: Có.

Options: Có; Không; Chưa biết / không rõ; Không muốn trả lời

R02

R02 Cơ sở anh/chị trả lời thay mặt có hoạt động tại Hà Nội?

Response type: Chọn một. Required status in planning dictionary: Có.

Options: Có; Không; Chưa biết / không rõ; Không muốn trả lời

R03

R03 Anh/chị là chủ, quản lý hoặc nhân viên được phép trả lời và hiểu cách cơ sở xử lý món chưa bán?

Response type: Chọn một. Required status in planning dictionary: Có.

Options: Có; Không; Chưa biết / không rõ; Không muốn trả lời

R04

R04 Loại hình chính của cơ sở là gì?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Nhà hàng / quán ăn; Tiệm bánh; Quán cà phê có bán đồ ăn; Bếp ăn / căng tin; Khác; Chưa biết / không rõ; Không muốn trả lời

R05

R05 Thông thường có bao nhiêu người làm việc tại cơ sở?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: 1–3 người; 4–10 người; 11–20 người; Từ 21 người; Chưa biết / không rõ; Không muốn trả lời

R06

R06 Trong 7 ngày vừa qua, cơ sở có món đã chuẩn bị nhưng chưa bán và chưa phục vụ khách vào bao nhiêu ngày?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: 0 ngày; 1–2 ngày; 3–4 ngày; 5–7 ngày; Chưa biết / không rõ; Không muốn trả lời

R07

R07 Trong 7 ngày đó, cơ sở đã xử lý món chưa bán bằng những cách nào? (Chọn tất cả phương án phù hợp; chọn riêng Không có món dư / Chưa biết / Không muốn trả lời.)

Response type: Chọn nhiều. Required status in planning dictionary: Không.

Options: Bán giảm giá; Để nhân viên sử dụng; Cho / tặng; Bỏ đi; Cách khác; Không có món dư; Chưa biết / không rõ; Không muốn trả lời

R08

R08 Cơ sở đã từng dùng ứng dụng hoặc nền tảng trực tuyến để đăng bán món ăn chưa?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Có; Không; Chưa biết / không rõ; Không muốn trả lời

R09

R09 Theo mô tả vừa đọc, Food Rescue trong khảo sát này chủ yếu kết nối loại đồ ăn nào?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Món chưa bán và chưa phục vụ khách; Thức ăn khách đã dùng dở; Cả hai loại; Chưa biết / không rõ; Không muốn trả lời

R10

R10 Với một món chưa bán phù hợp, mức giảm giá cao nhất so với giá bán thông thường mà cơ sở có thể cân nhắc là khoảng nào?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: 0% — không giảm giá; 1–19%; 20–39%; 40–59%; Từ 60% trở lên; Không cân nhắc bán qua ứng dụng; Chưa biết / không rõ; Không muốn trả lời

R11

R11 Những khung giờ nào cơ sở có thể bàn giao món chưa bán cho người đến lấy? (Chọn nhiều; chọn riêng Không có / Chưa biết / Không muốn trả lời.)

Response type: Chọn nhiều. Required status in planning dictionary: Không.

Options: Trước 11 giờ; 11 đến trước 14 giờ; 14 đến trước 17 giờ; 17 đến trước 20 giờ; Từ 20 giờ trở đi; Không có khung giờ phù hợp; Chưa biết / không rõ; Không muốn trả lời

R12

R12 Cho mỗi đợt đăng món, cơ sở có thể dành tối đa khoảng bao nhiêu phút để nhập thông tin lên ứng dụng?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Không thể dành thời gian; 1–5 phút; 6–10 phút; 11–20 phút; Trên 20 phút; Chưa biết / không rõ; Không muốn trả lời

R13

R13 Nếu được lựa chọn, hình thức bàn giao nào phù hợp nhất với cơ sở?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Người mua tự đến lấy; Một người được người mua nhờ đến lấy; Cả hai đều phù hợp; Muốn có đơn vị trung gian nhận theo đợt; Chưa có hình thức phù hợp; Chưa biết / không rõ; Không muốn trả lời

R14

R14 Anh/chị lo ngại đến mức nào về việc bảo đảm vệ sinh của món ăn trong quá trình chờ bàn giao?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hoàn toàn không lo ngại; Ít lo ngại; Lo ngại ở mức vừa; Khá lo ngại; Rất lo ngại; Chưa biết / không rõ; Không muốn trả lời

R15

R15 Anh/chị lo ngại đến mức nào rằng việc đăng bán món chưa bán có thể ảnh hưởng xấu đến hình ảnh cơ sở?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hoàn toàn không lo ngại; Ít lo ngại; Lo ngại ở mức vừa; Khá lo ngại; Rất lo ngại; Chưa biết / không rõ; Không muốn trả lời

R16

R16 Anh/chị lo ngại đến mức nào về thời gian và công việc phát sinh cho nhân viên?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hoàn toàn không lo ngại; Ít lo ngại; Lo ngại ở mức vừa; Khá lo ngại; Rất lo ngại; Chưa biết / không rõ; Không muốn trả lời

R17

R17 Anh/chị lo ngại đến mức nào về việc người mua đặt rồi không đến lấy?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hoàn toàn không lo ngại; Ít lo ngại; Lo ngại ở mức vừa; Khá lo ngại; Rất lo ngại; Chưa biết / không rõ; Không muốn trả lời

R18

R18 Anh/chị lo ngại đến mức nào về khó khăn khi nhân viên sử dụng giao diện đăng món?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hoàn toàn không lo ngại; Ít lo ngại; Lo ngại ở mức vừa; Khá lo ngại; Rất lo ngại; Chưa biết / không rõ; Không muốn trả lời

R19

R19 Lợi ích kinh tế từ bán món chưa bán có thể bù được thời gian và chi phí tham gia của cơ sở.

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hoàn toàn không đồng ý; Không đồng ý; Không đồng ý cũng không phản đối; Đồng ý; Hoàn toàn đồng ý; Chưa biết / không rõ; Không muốn trả lời

R20

R20 Việc giúp người mua tiếp cận món ăn với chi phí thấp hơn là một lý do để cơ sở tham gia.

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hoàn toàn không đồng ý; Không đồng ý; Không đồng ý cũng không phản đối; Đồng ý; Hoàn toàn đồng ý; Chưa biết / không rõ; Không muốn trả lời

R21

R21 Giảm lãng phí thực phẩm là một lý do để cơ sở tham gia.

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Hoàn toàn không đồng ý; Không đồng ý; Không đồng ý cũng không phản đối; Đồng ý; Hoàn toàn đồng ý; Chưa biết / không rõ; Không muốn trả lời

R22

R22 Nếu có món chưa bán phù hợp và ứng dụng hoạt động như mô tả, cơ sở có khả năng thử sử dụng trong 30 ngày tới không?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Chắc chắn không; Có lẽ không; Chưa nghiêng về có hay không; Có lẽ có; Chắc chắn có; Chưa biết / không rõ; Không muốn trả lời

R23

R23 Trong điều kiện trên, cơ sở có khả năng đăng ít nhất một món trong 30 ngày tới không?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Chắc chắn không; Có lẽ không; Chưa nghiêng về có hay không; Có lẽ có; Chắc chắn có; Chưa biết / không rõ; Không muốn trả lời

R24

R24 Nếu tiếp tục có món chưa bán phù hợp, cơ sở có khả năng sử dụng ứng dụng nhiều lần trong 30 ngày tới không?

Response type: Chọn một. Required status in planning dictionary: Không.

Options: Chắc chắn không; Có lẽ không; Chưa nghiêng về có hay không; Có lẽ có; Chắc chắn có; Chưa biết / không rõ; Không muốn trả lời

R25

R25 Ba hỗ trợ nào dưới đây hữu ích nhất để cơ sở cân nhắc tham gia? (Tối đa 3; chọn riêng Không cần / Chưa biết / Không muốn trả lời.)

Response type: Chọn nhiều. Required status in planning dictionary: Không.

Options: Mẫu đăng món để giảm thao tác; Hướng dẫn ghi thông tin món và bảo quản; Quy định khung giờ nhận rõ ràng; Nhắc người mua và xử lý trường hợp không đến; Hướng dẫn mã xác nhận dễ hiểu; Quy trình người được nhờ đến lấy; Bảo vệ thông tin liên hệ; Quy trình phản ánh / khiếu nại rõ ràng; Không cần hỗ trợ trong danh sách; Chưa biết / không rõ; Không muốn trả lời

R26

R26 Điều gì khiến cơ sở còn do dự nhất, hoặc cần thay đổi điều gì trước khi tham gia? (Không bắt buộc; xin không ghi tên, số điện thoại hoặc địa chỉ cụ thể.)

Response type: Câu mở. Required status in planning dictionary: Không.

R27

R27 Những loại thực phẩm nào cơ sở có thể cân nhắc đăng nếu có phần chưa bán phù hợp? (Chọn nhiều; chọn riêng Không có / Chưa biết / Không muốn trả lời.)

Response type: Chọn nhiều. Required status in planning dictionary: Không.

Options: Món ăn hoặc suất ăn đã chế biến; Bánh mì hoặc bánh nướng; Rau củ quả chưa chế biến; Thực phẩm đóng gói; Loại khác; Không có loại phù hợp; Chưa biết / không rõ; Không muốn trả lời

Documented invitation wording and historical information text

I retained two screenshots of restaurant invitations. In them, I describe discounted unsold food for nearby buyers to collect, with businesses choosing the food, price, quantity and pickup time. I reproduce the following passage from the fully visible invitation with the outlet name and form link omitted:

“Em là Lâm, đang phát triển Còn Ngon — app bán món chưa bán hết với giá giảm cho người mua quanh quán, khách tự đến lấy.”

“Khảo sát tự nguyện, không ràng buộc hợp tác.”

U14 and R09 refer to a description "just read." I retain the historical information text privately, but I have not assembled a dated version for each collection mode in these materials. The invitation excerpt above documents what I wrote to those businesses; I do not assume every participant received identical wording or saw the prototype.

APPENDIX B. FULL FIVE-CATEGORY RATING DISTRIBUTIONS

Entries are counts, including zeros. Categories 1–5 follow the exact order in Appendix A. For concern items, 1 = no concern and 5 = very concerned; for benefit items, 1 = strongly disagree and 5 = strongly agree; for intention items, 1 = definitely not and 5 = definitely yes. Category 3 is substantive. "Unsure," "Declined" and "Blank" are excluded from the top-two-category denominator but shown explicitly. U24 is a concern item despite its position among benefit questions.

Item	Batch	Total	1	2	3 midpoint	4	5	Unsure	Declined	Blank
U18	initial	19	0	8	9	2	0	0	0	0
U18	additional	30	0	1	9	13	7	0	0	0
U18	pooled	49	0	9	18	15	7	0	0	0
U19	initial	19	2	10	2	1	0	0	4	0
U19	additional	30	6	8	7	2	0	1	6	0
U19	pooled	49	8	18	9	3	0	1	10	0
U20	initial	19	0	1	16	2	0	0	0	0
U20	additional	30	0	4	14	10	2	0	0	0
U20	pooled	49	0	5	30	12	2	0	0	0
U21	initial	19	1	8	7	2	1	0	0	0
U21	additional	30	0	6	13	6	5	0	0	0
U21	pooled	49	1	14	20	8	6	0	0	0
U22	initial	19	2	9	3	1	4	0	0	0
U22	additional	30	6	13	3	6	2	0	0	0
U22	pooled	49	8	22	6	7	6	0	0	0
U23	initial	19	0	1	0	11	7	0	0	0
U23	additional	30	0	1	5	20	3	1	0	0
U23	pooled	49	0	2	5	31	10	1	0	0
U24	initial	19	8	9	1	1	0	0	0	0
U24	additional	30	8	14	8	0	0	0	0	0
U24	pooled	49	16	23	9	1	0	0	0	0
U25	initial	19	0	1	1	9	8	0	0	0
U25	additional	30	0	0	2	20	8	0	0	0
U25	pooled	49	0	1	3	29	16	0	0	0
U26	initial	19	0	0	2	8	9	0	0	0
U26	additional	30	2	3	9	13	2	1	0	0

U26	pooled	49	2	3	11	21	11	1	0	0
U27	initial	19	0	1	5	8	5	0	0	0
U27	additional	30	2	6	11	10	0	1	0	0
U27	pooled	49	2	7	16	18	5	1	0	0
U28	initial	19	0	5	9	4	1	0	0	0
U28	additional	30	4	9	12	4	0	1	0	0
U28	pooled	49	4	14	21	8	1	1	0	0
R14	initial	41	1	1	8	16	15	0	0	0
R14	additional	10	0	0	1	6	3	0	0	0
R14	pooled	51	1	1	9	22	18	0	0	0
R15	initial	41	4	13	6	6	12	0	0	0
R15	additional	10	0	2	3	4	1	0	0	0
R15	pooled	51	4	15	9	10	13	0	0	0
R16	initial	41	0	4	24	9	4	0	0	0
R16	additional	10	0	0	3	5	2	0	0	0
R16	pooled	51	0	4	27	14	6	0	0	0
R17	initial	41	0	0	9	27	5	0	0	0
R17	additional	10	0	0	1	5	4	0	0	0
R17	pooled	51	0	0	10	32	9	0	0	0
R18	initial	41	7	15	8	8	3	0	0	0
R18	additional	10	0	4	1	3	2	0	0	0
R18	pooled	51	7	19	9	11	5	0	0	0
R19	initial	41	2	10	17	10	1	1	0	0
R19	additional	10	0	1	3	4	1	1	0	0
R19	pooled	51	2	11	20	14	2	2	0	0
R20	initial	41	0	7	20	7	7	0	0	0
R20	additional	10	0	0	1	8	1	0	0	0
R20	pooled	51	0	7	21	15	8	0	0	0
R21	initial	41	0	2	12	12	15	0	0	0
R21	additional	10	0	0	0	3	7	0	0	0
R21	pooled	51	0	2	12	15	22	0	0	0
R22	initial	41	1	8	12	16	3	1	0	0
R22	additional	10	0	2	2	4	1	1	0	0
R22	pooled	51	1	10	14	20	4	2	0	0
R23	initial	41	5	7	13	13	2	1	0	0
R23	additional	10	0	3	3	4	0	0	0	0
R23	pooled	51	5	10	16	17	2	1	0	0

R24	initial	41	11	9	14	5	1	1	0	0
R24	additional	10	1	3	4	2	0	0	0	0
R24	pooled	51	12	12	18	7	1	1	0	0

APPENDIX C. POST HOC INCLUSION RULES AND REPRODUCIBILITY

C.1. Inclusion decisions and screening flow

I documented these rules on 14 October 2026 after inspecting the data (version 2026-10-14-v3-posthoc). I did not preregister them. Row numbers refer to the fixed 14 October response sheets, with the header in row 1. I did not count participant-pool profiles as additional responses.

I excluded nine buyer entries that did not meet the recorded consent, age, Hanoi-location, food-budget-difficulty or household screen. I also excluded 34 initial buyer entries whose source status had not been established. I excluded all 34 from every reported analysis. I have not established whether those records were test entries or responses collected from participants.

I retained the other 49 buyer entries and 51 business entries for descriptive analysis, separating the initial and additional batches. The stricter buyer sensitivity omits four further entries after a repeated-comment check. I did not alter answer content or select records to reach a target sample size or obtain a more favorable result.

Table C1. Record flow by batch

Record stage	**Initial buyers**	**Additional buyers**	**Initial businesses**	**Additional businesses**
Questionnaire records before screening	62	30	41	10
Failed eligibility screen	9	0	0	0
Original response source unconfirmed	34	0	0	0
Retained analysis	19	30	41	10
Stricter buyer sensitivity	15	30	unchanged	unchanged

I found no identical complete answer sets among the retained records. Five initial buyer comments matched after normalization of Unicode, letter case, punctuation and whitespace. For sensitivity only, I retained the earliest sheet occurrence, row 23, and omitted rows 26, 27, 29 and 31. Their full answer sets are not identical. Matching comments can reflect distinct participants, transcription practices or duplication; the original records are needed to distinguish these possibilities. I have not reworded the recorded comments or assigned a cause to the match. I found no repeated complete answer sets or nonblank comments in either additional batch under these checks.

My source audit is incomplete. The outstanding checks are the original answer, consent and eligibility record, and distinct household or outlet for each retained questionnaire. I will record any resulting inclusion correction and regenerate the affected tables. For confirmed duplicates, my rule is to retain the first complete eligible source-backed response unless a documented correction supersedes it.

C.2. Sensitivity to buyer inclusion decisions

Table C2. Retained and stricter buyer analyses, each separated by batch

Buyer version / batch	**n**	**Trial U26**	**Order U27**	**Repeat U28**	**Hygiene U18**	**Consideration ≥60% U32 (including nonparticipation)**
49 / initial	19	17/19 (89.5%)	13/19 (68.4%)	5/19 (26.3%)	2/19 (10.5%)	7/19 (36.8%)

49 / additional	30	15/29 (51.7%)	10/29 (34.5%)	4/29 (13.8%)	20/30 (66.7%)	1/29 (3.4%)
49 / pooled	49	32/48 (66.7%)	23/48 (47.9%)	9/48 (18.8%)	22/49 (44.9%)	8/48 (16.7%)
45 / initial	15	13/15 (86.7%)	9/15 (60.0%)	5/15 (33.3%)	2/15 (13.3%)	3/15 (20.0%)
45 / additional	30	15/29 (51.7%)	10/29 (34.5%)	4/29 (13.8%)	20/30 (66.7%)	1/29 (3.4%)
45 / pooled	45	28/44 (63.6%)	19/44 (43.2%)	9/44 (20.5%)	22/45 (48.9%)	4/44 (9.1%)

In the 45-questionnaire sensitivity analysis, I omitted four category 4–5 trial answers and four minimum-discount answers of at least 60%, and no category 4–5 repeated-use answers. This changes the reported proportions without establishing whether the four records belong to distinct people. I retained all 51 business questionnaires: 41 initial and ten additional.

C.3. Timestamp comparison and reproducibility

I compared all populated cells in the 14 October snapshot with the live response sheets on 16 October. The 92 buyer timestamp cells and 51 business timestamp cells all differed. I found no changes to questionnaire answers or column headers, and no added or removed records. I recorded every old and current timestamp in a private comparison log.

Response sheet	Timestamp date range in 14 October snapshot	Timestamp date range in 16 October comparison	Timestamp cells changed	Answer/header cells changed
Buyers	6–14 October 2026	11 July–23 September 2026	92	0
Businesses	9–14 October 2026	10 July–17 September 2026	51	0

These ranges describe the two versions of the timestamp columns in Hanoi time. I have not linked each corrected date to its original chat, note or submission record, so I do not treat either column as a verified collection calendar. In the saved snapshot, the 30 additional buyer entries span 185 seconds and the ten additional business entries span 108 seconds. These are sheet-entry spans; I did not measure interview duration. The available timestamp comparison also does not identify the method used to enter the additional answers.

I kept the numerical results unchanged because answer content and inclusion decisions were unchanged. The saved snapshot SHA-256 is 8d2753348b5f88929f3903d6e99fbc1499e192d0aa0ff4752d3632b3234c74c7. The accompanying aggregate_counts.json contains single-item frequencies for each analysis version and batch. The supplied command python reproduce_tables.py regenerates the aggregate tables and CSV calculations. Individual source records remain private.

I found no unrecognized options, support selections above the stated maximum, or exclusive multiple-choice options combined with other options. I retained all recorded comprehension and access-barrier answers in the reported distributions. These checks establish consistency with the questionnaire structure, not the accuracy of the original reports.