

# THE WHEEL OF RETAILING IS STILL SPINNING: PROMISES, COMPROMISES, AND PITFALLS OF QUICK-COMMERCE

Edoardo Fornari<sup>b</sup>, Francesca Negri<sup>a</sup>, Alessandro Iuffmann Ghezzi<sup>a</sup>

<sup>a</sup> Catholic University of the Sacred Heart, Faculty of Economics and Law

<sup>b</sup> Catholic University of the Sacred Heart, Faculty of Agriculture, Food and Environmental Sciences

## ABSTRACT

In the fast-paced retailing environment, consumers' needs still drive purchase decisions. Yet, the increasing diffusion of new technologies and new business models suggests that shopping is on the verge of a quantum jump into a realm where innovations, driven by newer digital-native players, are changing the game of retailing and setting its future developments. Ultrafast deliverers fully belong to this category: with the defiant promise of delivering goods in less than 30 minutes, they are shifting the paradigms of e-commerce into the newborn construct of Quick Commerce (Q-Commerce). Since everything comes at a price, this paper provides a definition of Q-Commerce and discuss the challenges faced by ultrafast deliverers in keeping the wheel of retailing move forward but not without a few compromises to the retailing-mix.

**KEYWORDS:** quick-commerce, ultrafast delivery, retail business model, content analysis, customer experience, frictionless retailing

## 1. Theoretical background

The “*Wheel of Retailing*” theory has always been the main point of reference for academic studies on the topic of retail innovation. According to this stream of literature, innovation of retail solutions is significant only if it leads to the emergence of a brand new and disruptive business model (Hollander, 1960). Retail Business Model (RBM) innovation has been defined as a change beyond current practice in one or more elements of the retailing offer (i.e., formats, activities, and governance) and their interdependencies, thereby modifying the retailer's organizing logic for value creation and appropriation (Sorescu et al., 2011). This definition implies both system-wide changes and material alterations of value creation and appropriation logics, together with a third and stringent condition of uniqueness: it should be a method of conducting business that has not yet been implemented in practice at the time of its introduction. An important characteristic of an RBM innovation is whether its primary purpose is to enhance value creation or value appropriation (Sorescu et al., 2011). Recently, these principles have been systematized in the following customer-

centric conceptual framework for the success of innovative solutions in contemporary retailing, by Gauri et al., 2021 (see Fig. 1).

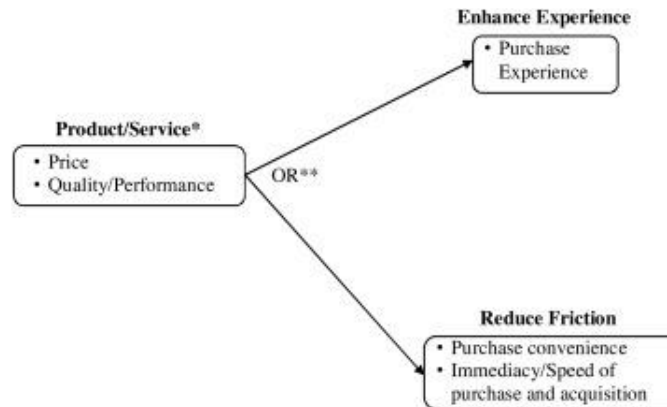


Fig. 1 - Paths for customer-centric innovative retail formats (Gauri et al., 2021)

Assuming that consumers nowadays engage with retailers using digital and mobile devices, yet quality and price considerations are no longer enough to gain compelling insights from the customer journey, even if these two elements still remain key characteristics of retailer’s offering: quality represents the most important intrinsic characteristic of a product and price the most crucial extrinsic characteristic (Kahn, 2018). Now, given the possibility of marketers to track and map the customer journey identifying points of friction and opportunities to enhance the customer experience, the considered framework proposes a twofold path towards a customer-centric innovative retail format: either (1) reduce frictions in the consumers’ shopping process or (2) enhance the shopping experience. The first path aims at eliminating obstacles and impediments in general by shortening waiting times, reducing inconveniences, and eliminating unnecessary steps in the journey; the second path creates valuable experiences based on customers’ preferences and behaviors.

## 2. The Quick-Commerce innovative Retail Business Model

From 2020 onwards, Online Grocery Shopping (OGS) has represented, also due to Covid-19 pandemic, one of the most dynamic and innovative retail setting. In 2021 and during the first months of 2022, as the pandemic recedes, OGS still accounted for a steadily growing percentage of all grocery retailing (Babin et al., 2021). The convenience of home delivery and the utilitarian

benefit it creates, attracts to the online channel millions of consumers who perceive the added value of allowing someone else to select and deliver their groceries. Home delivery of groceries skyrocketed as consumers seemed to be less motivated by low price than they were by the need of enhanced health, physical safety and security which served as a major determinant of retailers' adoption of technology. The need for improved consumer and employee health, as well as the number of people adopting "domestic lifestyles", has led retailers to adopt more store, warehouse, and delivery automation technologies (Shankar et al., 2021). While many brick and mortar retailers have been forced to close physical stores and move rapidly toward technology-based solutions such as online ordering, we started witnessing the emergence of new types of digital-native and mobile-only grocery retailers; focused on delivering a solution to a key problem of the e-tailing era: *last mile delivery*, defined as the final step in the supply chain, delivering an order to a customer (Yuen et al., 2019). Searching for optimal solutions to manage the last mile is still putting pressure to Amazon and Walmart, and accounting for a disproportionate amount of time and costs in their channel operations (Zhou et al., 2020), leaving space for brand new players to enter the market and hence keep spinning the wheel of retailing introducing a digital-first innovative customer-centric business model (Gauri et al., 2021). This new RBM boldly intends to both reduce frictions in the consumers' shopping process and enhance the shopping experience (see Fig. 1), but it need to be alert of potential pitfalls. This new crop of companies looking to push the envelope on last mile delivery even further is thus acting unnoticed through a network of dark stores in densely populated urban areas, with funding and expansion plans across Europe, Asia, Russia, South America, and the States as well. The disruptive promise is "*ultrafast delivery*" within and not later than 30 minutes from checkout to the doorstep: a leap forward Amazon's two-day shipping in 2005 that is made possible by armies of delivery people on bikes and scooters. The main protagonists of this innovative formula at a European level are players like Getir, Flink, Dija, Gorillas and Macai, all born between 2015 and 2021 and still at the very beginning of their development.

In terms of value creation, these ultrafast deliverers, also called Quick-Commerce (Q-Commerce) retailers, wish to pursue: (i) customer efficiency, (ii) effectiveness, and (iii) engagement. *Customer efficiency* involves making customers' access to products as easy as possible and being more attractive partners to manufacturers seeking to place their products in a marketplace (Xue and Harker, 2002). *Customer effectiveness* refers to the degree to which the retailer can facilitate consumers' realization of consumption goals, so as can access to products that truly meet their needs (Negash et al., 2003). *Customer*

*engagement* involves the degree to which the retailer can design customer experiences that evoke emotional involvement that goes “beyond purchase” (van Doorn et al., 2010).

The innovative Q-Commerce model aims at significantly improving customer efficiency by cutting-edge mobile-only shopping experiences. Effectiveness relies heavily upon short delivery times; enduring engagement is provided by defiant advertising<sup>1</sup> and a range that is constantly renewed of certain items. Ultrafast delivery may create value by achieving a strong service effectiveness, thus enhancing customer lock-in effects. A unique customer experience may hold the key to maintaining the competitive advantage and producing customer lock-in effects (Zauberman et al., 2003). In retail, lock-in has traditionally been implemented through incentives for enduring customer relationships and strengthening the store (app) loyalty.

However, such an innovative RBM presents a big pitfall. In terms of operational efficiency, managing a widespread of dark stores and delivery people generates high operating costs that risk jeopardizing the achievement of the financial break-even point within an acceptable deadline. This is particularly dangerous considering that nearly all Q-Commerce players are digital start-ups with no prior availability cash flows or other well-established business streams that could offset the inevitable initial losses<sup>2</sup>. This prompts ultrafast deliverers to search for cost economies in their operations. That’s why they particularly compromise on the two main areas of the purchase experience, offering (i) higher selling prices, and (ii) a smaller (less deep and less broad) product assortment than more “traditional” competitors operating in the same e-grocery retail setting.

Starting from these assumptions, the paper herein aims to deepen market potential of the Q-Commerce business model by focusing on the following two Research Questions (RQs):

RQ1: What’s the degree of innovation associated by users with the “within-30-minutes” home delivery formula?

---

<sup>1</sup> An effective example is represented by the challenging “*Faster than you*” advertising payoff, used by German-based Gorillas.

<sup>2</sup> The Gorillas’ case confirms this reasoning, as after two record fundraising rounds of over 1.3 bln \$ overall in 2020 and 2021, the company has suddenly as well as unexpectedly experienced distrust by financial investors in 2022 and this forced immediate cost cutting initiatives, including complete withdrawal from many countries, including Italy.

RQ2: Do the compromise elements (*high prices and limited assortment*) penalize the quality of the shopping experience with the Q-Commerce APPs?

To do so, we first collected data on Q-Commerce players currently operating in Italy to explore in more details the main characteristics of this innovative business model. Then, we text analyzed opinions of users (ratings and reviews) on their personal experience of interacting with the same players' app.

### 3. The characteristics of Quick-Commerce players

Only three Q-Commerce players entered the Italian grocery retail market: Getir, Gorillas<sup>3</sup> and Macai (see Fig. 2).

Main characteristics	GETIR	GORILLAS	MACAI
Headquarter	Istanbul	Berlin	Milan
Kick-off	2015	2020	2021
Available in Italy (since)	October 2021	September 2021	May 2021
Coverage in Italy (provinces)	2	5	5
Average delivery time	20 mins	10 mins	15-30 mins

Fig. 2 – Main characteristics of Getir, Gorillas and Macai in Italy, September 2022

Their presence is limited to a few large cities (Milan and Rome above all) and their main target is represented by young professionals and young families, aged 25-50, living in the city center, with both education level and purchase power higher-than average<sup>4</sup>. The speed of the service is guaranteed, considering that, on average, only 6% of total orders are delivered after the communicated time. Furthermore, even the average time spent on the APP to search and purchase is really limited: only 7 minutes *versus* 24 minutes of websites and APPs managed by offline-native grocery retailers.

In terms of performance, according to the data provider Q-Berg/IRI<sup>5</sup>, average purchased basket value is 24 euros, and it is similar to that of modern grocery retailers selling online (equal to 27 euros), while the average basket size is smaller, 10 *versus* 18 items. This means that the average sales price is significantly higher (150 average price index) and 15% of items are premium-

<sup>3</sup> Due to financial problems described above, Gorillas moved out of Italy in July 2022.

<sup>4</sup> Data coming from company disclosures and direct interviews to Q-Commerce practitioners (August 2022).

<sup>5</sup> Data coming from an in-depth comparative analysis performed in Milan in June 2022.

priced. In fact, 56% of comparable items are more expensive than on the website/apps of multichannel grocery retailers, and price promotions are limited, as Q-Commerce players prefer to maintain prices stable over time. Finally, product assortment is limited; on average it is made of less than 2,000 items, while multichannel competitors offer a deeper range of 12,500 items.

#### **4. Analysis of the Q-Commerce users' opinions**

App reviews are a useful source of user opinions (Malik et al. 2018; Masrury and Alamsyah 2019; Wen and Chen 2020). Mining these opinions involves identifying user sentiment about discussed topics (Dabrowski et al. 2020), features or software qualities (Dabrowski et al. 2022). Moreover, as highlighted by Dąbrowski et al. (2022), studies have shown that users discuss diverse topics in reviews (Pagano and Maalej 2013), such as app features, qualities requirements or issues. A more recent study (Dąbrowski et al., 2022), thanks to a systematic literature review, classified app review analysis in terms of mined information, applied data mining technique and in terms of supported software engineering activities.

In that way, by providing a crowd-sourced customer satisfaction highlight, ratings and reviews add value to the mobile app developer, potential new users and companies, that become able to improve their mobile app in the light of the many *stimuli* and suggestions. Nevertheless, only a few papers worked on this kind of UGC, maybe because it's quite difficult to collect primary data: in many of the cases, the easy download is permitted only for developer, and manual analysis of those reviews is challenging due to their large volume and noisy nature. Such *corpi* has plenty of linguistic structure intended for human consumption rather than for computers (Jurafsky and Martin 2009, Dąbrowski et al., 2022): given this fact, it is not surprising that most primary studies adopt Natural Language Processing (NLP) techniques to support review analysis.

In terms of consistency, Hoon et al. (2012) analyzed 8.7 million reviews from 17,330 apps on the App Store and came to a very interesting point: the most frequently used words in customer reviews lean toward expressions of *sentiment* despite *employment* of only approximately 37% of the words within the English language dictionary. Secondly, the range of words used to express negative opinions is significantly higher than when positive sentiments are shared.

In the light of this considerations, all the Mobile App reviews written in Italy and shared in the period 01/01/2021-01/09/2022 belonging to the three above mentioned Q-Commerce players, namely Getir, Gorillas and Macai, have been collected using the online service AppFollow. Fig. 3 below summarizes the main results obtained.

<b>Q-Commerce players</b>	<b>Mobile App #1 (App Store)</b>	<b>Mobile App #2 (Google Play)</b>
<i>Getir</i>	Average rating: 4,9 #56 Shopping # evaluations: 14.418	Average rating: 4,5 # evaluations: 786.557
<i>Gorillas</i>	Average rating: 4,8 #76 Food&Drinks #evaluations: 2.214	Average rating: 3,9 # evaluations: 20.030
<i>Macai</i>	Average rating: 4,6 #81 Food&Drinks # evaluations: 819	Average rating: 3,2 # evaluations: 345

Fig. 3 – Mobile App reviews of Q-Commerce players, September 2022

Data collection produced an overall *corpus* of 575 valid reviews. Then, a manual content analyses has been conducted looking for the main reasons of satisfaction (reviews with 4 and 5 stars: 72,8%) and dissatisfaction (reviews with 1 and 2 stars: 23,9%), in line with the Q-Commerce antecedents discussed in previous sections. Due to the lack of scientific theoretical research in the area, the clustering variable of Q-Commerce mobile app pattern was selected inductively, based on interviews to practitioners (see Appendix 1).

Each textual review was considered a single unit of content (Krippendorff, 2004) and was classified into one category (Weber, 1990), taking notes of all other elements included. The classification work was carried out independently, but to ensure objectivity of the analysis, a part of the dataset (25%) was randomly extracted and analyzed by all the Authors: in most cases Authors' evaluations were congruent and aligned. The content analysis has been carried out following the criterion of completeness and exhaustiveness.

During the mining process, the following aspects have been taken into consideration and highlighted:

- customer satisfaction and dissatisfaction drivers;
- awareness of a due compromise on assortment and prices to guarantee fast delivery.

Confirming previous literature results (Hoon et al., 2012), negative reviews (31,9 words on average) are written with a higher number of words than positive ones (24 words on average). In most of the reviews, regardless of the company, clearly emerges the strong sense of amazement for the respect of the promised delivery time, almost as if few really believed in the promise of Q-Commerce before to try it or the exaltation for specific detail of the service. Then, it is confirmed that the most frequently used words in customer reviews lean toward expressions of *sentiment* despite *employment*. However, the present study adds a corollary to the previous ones: the point underlined by Hoon et al. (2012) is especially true for positive reviews, and much less for negative ones. In relative terms, in fact, while in the negative reviews the references to functioning (*employment*) are frequently present (almost half of the *corpus*), in the positive ones they are practically absent.



Fig. 4 – Drivers of satisfaction and dissatisfaction towards Q-Commerce, September 2022

While the reasons for dissatisfaction are fragmented, those of satisfaction are rather concentrated around two specific elements of Q-Commerce: (i) the timeliness of delivery, and (ii) the general quality of the service. As highlighted in Appendix 1, the typical elements of the product offering such as price, quality and performance determine the purchase experience (especially in positive reviews).

Furthermore, considering the reviews' distribution, there's no doubt that Q-Commerce reduces frictions, through providing purchase immediacy. On this note, the usability of the mobile app, in terms of user-friendly experience, is also decisive. All this confirm that the degree of innovation associated by users with the “within-30-minutes” home delivery formula is high and significant (RQ1).



Moreover, text analysis highlighted the following evidence:

- the advertising pressure that accompanied the Q-Commerce advent has generated high expectations and a sense of challenge in users (*“let’s see if they can really do it”*). When expectations were met, the “Wow-effect” led many people to just leave a review, but on the other hand those customers who were disappointed were two times disappointed (by the scarce service, and by the misleading advertising);
- users are generally aware that such a fast delivery is normally accompanied by a limited assortment depth, but this doesn’t make them seriously annoyed;
- prices are not expected to be competitive to that of physical supermarkets, so the fact that prices are high does not produce dissatisfaction.

We can thus conclude that, according to our results, the attention of users is strongly focused on delivery immediacy only. Consequently, nor limited assortment or high prices significantly compromise the shopping experience with the Q-Commerce APPs (RQ2).

## References

- Ali M, Joorabchi ME, Mesbah A (2017) Same app, different app stores: A comparative study. In: Proceedings of the 4th international conference on mobile software engineering and systems, MOBILESoft ’17. IEEE Press, pp 79–90
- Babin, B.J., Feng, C., Borges, A., 2021. As the wheel turns toward the future of retailing. *Journal of Marketing Theory and Practice* 29, 78–91. <https://doi.org/10.1080/10696679.2020.1860688>
- Dabrowski J, Letier E, Perini A, Susi A (2020) Mining user opinions to support requirement engineering: An empirical study. In: Dustdar S, Yu E, Salinesi C, Rieu D, Pant V (eds) *Advanced information systems engineering - 32nd international conference, CAiSE 2020, Grenoble, France, June 8-12, 2020, Proceedings*, Springer, *Lecture Notes in Computer Science*, vol 12127. pp 401–416. [https://doi.org/10.1007/978-3-030-49435-3\\_25](https://doi.org/10.1007/978-3-030-49435-3_25)
- Dąbrowski, J., Letier, E., Perini, A. et al. (2022) Analysing app reviews for software engineering: a systematic literature review. *Empir Software Eng* 27, 43. <https://doi.org/10.1007/s10664-021-10065-7>

Gauri, D.K., Jindal, R.P., Ratchford, B., Fox, E., Bhatnagar, A., Pandey, A., Navallo, J.R., Fogarty, J., Carr, S., Howerton, E., 2021. Evolution of retail formats: Past, present, and future. *Journal of Retailing* 97, 42–61. <https://doi.org/10.1016/j.jretai.2020.11.002>

Hollander, S.C., 1960. The Wheel of Retailing, Source: *Journal of Marketing*

Hoon L., Vasa R., Schneider JG., Mouzakis K., 2012. A preliminary analysis of vocabulary in mobile app user reviews. In *Proceedings of the 24th Australian Computer-Human Interaction Conference (OzCHI '12)*. Association for Computing Machinery, New York, NY, USA, 245–248. <https://doi.org/10.1145/2414536.2414578>

Kahn, B.E., 2018. *The Shopping Revolution*. Wharton Digital Press, Philadelphia, PA.

Krippendorff, K. (2004). Reliability in Content Analysis Some Common Misconceptions and Recommendations. In *Human Communication Research* (Vol. 30, Issue 3).

Malik H, Shakshuki EM, Yoo WS (2018) Comparing mobile apps by identifying 'hot' features. *Future Gener*

Masrury RA, Alamsyah A (2019) Analyzing tourism mobile applications perceived quality using sentiment analysis and topic modeling. In: 2019 7th international conference on information and communication technology (ICoICT). pp 1–6 *Computer Syst Weber, R. P. (Ed.), (1990), Basic content analysis (No. 49), Sage*

Negash, S., Ryan, T., Igbaria, M., 2003. Quality and effectiveness in Web-based customer support systems. *Information & Management* 40, 757–768.

Pagano D, Maalej W (2013) User feedback in the appstore: An empirical study. In: 2013 21st IEEE international requirements engineering conference (RE). pp 125–134

Shankar, V., Kalyanam, K., Setia, P., Golmohammadi, A., Tirunillai, S., Douglass, T., Hennessey, J., Bull, J.S., Waddoups, R., 2021. How Technology is Changing Retail. *Journal of Retailing* 97, 13–27. <https://doi.org/10.1016/j.jretai.2020.10.006>

Sorescu, A., Frambach, R.T., Singh, J., Rangaswamy, A., Bridges, C., 2011. Innovations in retail business models. *Journal of Retailing* 87. <https://doi.org/10.1016/j.jretai.2011.04.005>

Srisopha K, Phonsom C, Lin K, Boehm B (2019) Same app, different countries: A preliminary user reviews study on most downloaded ios apps. In: 2019 IEEE international conference on software maintenance and evolution (ICSME). pp 76–80

van Doorn, J., Lemon, K.N., Mittal, V., Nass, S., Pick, D., Pirner, P., Verhoef, P.C., 2010. Customer engagement behavior: Theoretical foundations and research directions. *J Serv Res* 13, 253–266. <https://doi.org/10.1177/1094670510375599>

Wen P, Chen M (2020) A new analysis method for user reviews of mobile fitness apps. In: Kurosu M (ed) Human-computer interaction. human values and quality of life - thematic Area, HCI 2020, Held as Part of the 22nd International Conference, HCII 2020, Copenhagen, Denmark, July 19-24, 2020, Proceedings, Part III, Springer, Lecture Notes in Computer Science, vol 12183. pp 188–199. [https://doi.org/10.1007/978-3-030-49065-2\\_14](https://doi.org/10.1007/978-3-030-49065-2_14)

Xue, M., Harker, P.T., 2002. Customer Efficiency Concept and Its Impact on E-Business Management, *Journal of Service Research*.

Yuen, K.F., Wang, X., Ma, F., Wong, Y.D., 2019. The determinants of customers' intention to use smart lockers for last-mile deliveries. *Journal of Retailing and Consumer Services* 49, 316–326. <https://doi.org/10.1016/j.jretconser.2019.03.022>

Zauberman, G., Diehl, K., Koenigsberg, O., Kornish, L., Levav, J., 2003. The Intertemporal Dynamics of Consumer Lock-In. *Journal of Consumer Research* 30.

Zhou, M., Zhao, L., Kong, N., Campy, K.S., Xu, G., Zhu, G., Cao, X., Wang, S., 2020. Understanding consumers' behavior to adopt self-service parcel services for last-mile delivery. *Journal of Retailing and Consumer Services* 52. <https://doi.org/10.1016/j.jretconser.2019.101911>

## Appendix 1

Examples of reviews linked to the framework: *Drivers that enhance experience*

<b>Drivers that enhance experience</b>	
<i>Negative purchase experience</i>	<p>SERV. QUALITY: “La velocità è io loro punto di forza ed è oggettivamente incredibile. Ma in ogni spesa ho ricevuto prodotti che o non erano più adatti al consumo (ananas vecchie e rinsecchite a profusione) o sarebbero scaduti dopo 2 giorni. Inoltre, i prezzi di frutta e verdura sono stellari: 5 euro al kilo per cavolfiori, melanzane, finocchi sono un furto.”   ID 221 2022-03-31 14:12:05</p> <p>MOB APP FUNCT: “Non puoi fare un ordine troppo pesante ma non c’è scritto da nessuna parte il limite e se lo hai superato ti viene detto solo al momento del pagamento, costringendoti a tornare indietro e modificare l’ordine. Oltre a questo, le promo sono scritte male e non rispettano i termini e condizioni”   ID 560, 2022-07-21 10:23:59</p> <p>CUSTOMER SERV: “Servizio di consegna impareggiabile, se ti serve però il supporto in chat è finita, chat aperta alle ore 13,57 e tutt’ora (17,28), non pervenuti. Ok l’attesa, ma...”, ID 125, 2021-11-16 16:29:35</p> <p>PUNCTUALITY: “Lodevole iniziativa ma in ADV dite 15 minuti per la consegna, sull’ HP dell’ App 30 minuti e al check-out “appena possibile”. speriamo in una maggior chiarezza anche perché adesso non so a che ora mi verrà consegnata. Grazie e buon lavoro.”   ID 5 2021-10-22 09:23:25</p> <p>OTHERS (territorial presence, csr, advertising, privacy, riders): “The app and the service is amazing, but it’s a really horrible company: the way they treat employees is frankly disgusting. App deleted, will recommend this to all my contacts”  ID 94, 2021-10-06 16:50:32</p>
<i>Positive purchase experience</i>	<p>SERV. QUALITY: “SONO ECCEZIONALI, A ROMA NEL MIO QUARTIERE ARRIVANO IN UN ATTIMO. OTTIMI PRODOTTI MA SOPRATUTTO.... VINO E BEVANDE GIA' FREDDE! ALTRA NOTA POSITIVA I RAGAZZI CHE CONSEGNA SONO EQUIPAGGIATI E INCLUSI NELL'ORGANIZZAZIONE DI IMPRESA. UNA SVOLTA. SPERO CONTINUINO A FAR BENE.”   ID 122, 2021-11-13 18:46:04</p> <p>PUNCTUALITY: “17 min e era già a casa, sembra magica. Ho avuto un problema con uno dei prodotti e hanno risolto velocemente. Veramente incredibile! Prima mi sembrava costoso, ma la qualità è stupenda.”   ID 79, 2021-09-07 10:37:55</p> <p>OTHERS (rider, csr, customer service, mobile app functioning):” Il servizio è veloce ma quello che fa la differenza davvero è l’assistenza clienti. Altrettanto veloce e customer-oriented. Well done!”  ID 165, 2022-01-08 21:39:30</p>