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### What matters most for requesters' trust in platform cooperatives? Validation of a vignette study.

Student:Riccardo Madonna (s3091309)Supervisors:dr. Simon Schafheitle, University of Twente<br/>dr. MSc Jeroen Meijerink, University of Twente<br/>prof. Alessia Sammarra, Università degli Studi de L'Aquila

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### Abstract

This study aims at identifying the main design principles of worker-owned food delivery platforms (platform cooperatives) which can hypothetically lead to the development of Trust from their requesters (restaurants and customers). We conducted a vignette study on European requesters through the use of an online survey, highlighting the role of trustworthiness dimensions in the development of Trust towards a gig platform. The main focus of the research is represented by the validation of the factorial survey, performed through a Cognitive pre-test and a Measurement Validation test, which enabled us to effectively operationalize the variables in question. Besides validating new measurement scales for these variables, the final purpose of the study is to show whether platform cooperatives not only represent a better alternative to capitalist platforms under an ethical perspective, by improving gig workers' conditions, but can also increase the level of requesters' trust through their fundamental design principles. Results showed that Training and Job Security are the most salient design principles of platform cooperatives related to Requesters' Trust. Implications of these findings enabled us to discuss potential ways in which existing cooperatives can increase their competitiveness and popularity in today's capitalist market, offering better solutions to both gig workers and requesters.

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### 1. Introduction

In the last decades, the advent of Online Labour Platforms (OLPs), such as Uber, Deliveroo, or JustEat, has revolutionised the logics and mechanics of the traditional labour market, allowing individuals to offer their services directly to their peers as self-employed with the support of technology (Frenken, Vaskelainen, Fünfschilling, & Piscicelli, 2020). In the so-called "gig economy", the demand and the supply of labour are matched by an online platform, working as an intermediary to satisfy the needs of both customers and job seekers. Moreover, food-delivery platforms, such as UberEats, can easily enable consumers to connect to various local restaurants and food providers with the use of a mobile app, not only providing them with more choices, but also allowing restaurants to reach more potential customers and increase their additional revenue (Chen, Liang, Liao, & Kuo, 2020). Thus, besides final consumers, also food suppliers (as labour requesters) benefit from the intermediation activity of OLPs and from the services offered by "gig workers". The existence of OLPs has surely contributed to improve the general efficiency of the transport and delivery sectors, to provide good-quality services for requesters, and to promote employment in several countries around the world, but it has to be said that these kinds of platforms show multiple deficits and disappointments from the social, political, and ethical perspective (Scholz, 2016). Since several years, the rise of the gig economy is generating tensions and turmoil among stakeholders. Unions, workers, and digital activists have often criticised platforms as they exercise control over gig workers without employing them (Non-Standard Employment relationship), generating legal issues, and use opaque algorithmic systems to assign or rank gigs (Bunders, Arets, Frenken, & De Moor, 2022; Lamers, Meijerink, Jansen & Boon, 2022). Furthermore, today's companies in the gig economy have become notorious for offering substandard wages, for mistreating workers and for discrimination. These criticisms are increasingly gaining social credibility, given growing worker and popular discontent (Schor, 2021). As a result, HRM practices and workers' experiences in the gig economy have become topics of major interest for researchers, regulators, and the general public (Kuhn, Meijerink & Keegan, 2021). Some efforts to improve the ethical conduct of platforms towards gig workers have also made their way without achieving a decisive shift in platforms' practices or workers' conditions (Healy, Pekarek, & Vromen, 2020).

However, in view of the multiple weaknesses displayed by the Non-Standard Employment relationship that characterizes workers in the gig economy, such as precarity, economic dependency, and job insecurity (Eum, 2019), a valid alternative to "traditional" capitalist platforms can be represented by Platform Cooperativism (Bunders et al., 2022). A worker cooperative is a

type of cooperative where worker-members, who represent the majority of membership, are both owners and participate in the operational life of the firm (Johnston & Land-Kazlauskas, 2018). As highlighted by Schneider (2018), canonical notions of corporate structure and governance usually tend to grant ownership and control to investors, since they bear direct financial risk, and they mostly fail to maintain high labour standards among user-workers and other contractors. By changing organizational design principles and by reorganizing their governance structure, cooperative OLPs can place more importance to the position of gig workers, improving their wealth and working conditions through membership and representation. Scholz (2017) uses the concept of 'platform cooperative' to describe a model that "embraces technology but wants to put it to work with a different ownership model, adhering to democratic values, so as to crack the broken system of the sharing economy that only benefits a few". Hence, Platform Cooperatives combine the online infrastructure of a platform as a mediator in social and economic interactions with the collective and democratic governance of a cooperative enterprise (Bunders et al., 2022). They are based on principles and values of equality, solidarity, democracy, and participation (Majee & Hoyt, 2011), and their main goal is "to create and maintain sustainable jobs generating wealth for their workermembers" (Eum, 2019). In platform cooperatives, workers can leverage their power and their control on a company to overcome the deficits of gig work and promote the conditions for better employment, safety, and protection. For example, as owners of a platform cooperative, gig workers can guarantee themselves the rights of better pay and job security as they decide on their own over commission rates and surplus value (Bunders et al., 2022). Moreover, workers can benefit from their membership because of a gain in shareholding, a say in the algorithms' workings, and many other entitlements resulting from their "workers-owners" status (Schneider, 2018; Scholz, 2016; Bunders et al., 2022; Johnston & Land-Kazlauskas, 2018). Therefore, establishing a cooperative platform design would represent a possible solution to the social, political, and ethical disappointments for which most of existing investor-owned platforms are criticized, ensuring that gig workers, as co-owners of the platform, are finally treated as humans and not just as mere factors of production.

Nevertheless, empirical examples of existing OLPs adopting a cooperative structure, although they have shown to offer more stable jobs and reliable social protections than traditional OLP models, highlight that these platforms are facing several difficulties to compete in a rooted capitalist market dominated by giants like 'Uber' or 'JustEat' (Scholz, 2016). For instance, Martin, Upham, & Klapper, (2017) illustrated the case of "Freegle", a British democratically governed digital platform which is promoting a more fair and sustainable sharing economy by enacting social and environmental values through its intermediation activity within local communities. "Freegle" is a

clear example of a company that was able to develop and then sustain a democratic model of governance for over 5 years, but, in contrast to non-cooperative organizations from the same sector as "Freecycle", it is not internationally well-known and still not representative of the gig economy as currently constituted. To mention an example from the food delivery industry, "Bestellenbij.nl" (Quick Food Delivery) is a Dutch emerging cooperative which is aimed at offering high-quality services to requesters whilst ensuring better working conditions and a fair reward to gig workers<sup>1</sup>. However, it is still not as popular as its "capitalist" rivals such as Thuisbezorgd.nl (JustEat), and still struggles to grow at national level in order to establish a "fairer delivery market" in the Netherlands. There could be several different reasons why platform cooperatives are still so rare in comparison to investor-owned platforms. Bunders et al. (2022) suggested that this may be caused by relative inefficiencies due to shrinking behaviours of members, because of the need to redistribute the income among fewer workers, or due to their economic condition and risk aversion which leads to under-investment issues. Another reason could be represented by cooperatives' susceptibility to regulatory obstacles and support structures in different institutional contexts. Traditional barriers to entry, such as average firm size in the industry or capital requirements, play a strong role in limiting the entry of new cooperative firms in the market (Conte & Jones, 2015). Besides that, the unpopularity of platform cooperatives can mainly be attributed to their inability to stimulate demand from their requesters as their capitalist competitors. As Schneider (2018) remarked, the fact that requesters do not purchase platform cooperatives' services can depend on the fact that cooperatives have often formed from a posture of reaction rather than anticipating desires or trends, only offering co-op versions of existing models, more than wholesale innovations. This lack of innovation can represent an important obstacle for emerging cooperatives to enter in a market which is already dominated by innovative and efficient capitalist firms. Nonetheless, to better understand the reasons of this low popularity of platform cooperatives, it is necessary to deepen which are the factors that can mainly lead requesters to increase their intentions to use an online platform and their willingness to transact through its intermediation services.

An often-mentioned reason for consumers not purchasing from Internet sellers is a lack of Trust (Petrovic, Ksela, Fallenbock, Kittl, Urban, & Zobel, 2003). Trust is a 'mental shortcut' that consumers use when trying to reduce the uncertainty of transactions in electronic markets (Falahat, Lee, Foo, & Chia, 2019). The study of Ha & Liu (2010) found out that Trust is one of the factors that are mostly related to consumers' demand, intended as purchase intention, towards an e-commerce platform. These findings confirmed McKnight & Chervany (2001)'s claims about Trust

<sup>&</sup>lt;sup>1</sup> https://www.bestellenbij.nl/onze-missie/

as an important predictor of consumers' behaviours and attitudes in online relationships, including purchasing, cooperating, and info-sharing behaviours. Researchers showed that an increase in Trust in an Intermediary will be positively associated with requesters' willingness to buy from vendors on that platform, because of a lower perceived transactional or relational risk deriving from possible opportunistic behaviours (Pavlou & Gefen, 2004; Chen, Lai, & Lin, 2014; Lu, Zhao, & Wang, 2010). Thus, it is assumed that the main problem hindering current platform cooperatives in stimulating demand from their requesters may be an absence of trust towards them. If requesters increased their trust in cooperative OLPs, these would increase their popularity and their competitivity in the market and, finally, they could concretely represent a better alternative to their investor-owned rivals under an ethical, social, and legal perspective. Before coming to the final research aim of this study, it is fundamental to introduce a clear and precise definition of "Trust", according to the relevant literature. Mayer, Davis, & Schoorman (1995) defined Trust as "the willingness of a party (trustor) to be vulnerable to the actions of another party (trustee) based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer et al., 1995). Applying this definition to the context of platforms (and other organizations in general), requesters would increase their trust in them when they expect that these would reduce a particular perceived risk deriving from their "vulnerability", so that they increase their willingness to take that risk (Schoorman, Mayer, & Davis, 2007). Mayer et al. (1995) also distinguished Trust from the concept of "Trustworthiness", defined as a characteristic of the trustee that is associated with its "disposition to lie" to the trustor. Whether a party is considered to be "trustworthy", the other's willingness to trust them would be affected. Trust implies indeed positive expectations regarding another party's behaviour and intentions and these expectations are based on the trustor's attributions regarding the trustworthiness of the other party (Pirson & Malhotra, 2011). Hence, the concepts of "Trust" and "Trustworthiness" are closely related to each other, since Trustworthiness is considered as the central trustee's peculiarity that is related the development of Trust from its trustors. The existing literature highlighted several factors that can explain Trustworthiness and that can lead requesters to build trust towards an organization (Trust Antecedents). In the Theory Section, indeed, there will be explored some of the design principles which are central for an organization and, more specifically, an online platform, to be assessed as "trustworthy". Moreover, there will be explained how emerging platform cooperatives show several characteristics that can be seen as a signal of trustworthiness and that are related to a particular perceived risk for requesters. However, in order to understand how platform cooperatives can further increase the level of trust from their requesters, it is important to assess which are the most salient elements, practices, or design principles, that

cooperatives should improve or develop, which are significantly associated with the amount of trust that requesters may show towards them. As already mentioned, the development of Trust depends on a higher perceived Trustworthiness of the platform, associated with the reduction of transactional and relational risks for requesters.

Hence, the aim of this study is to demonstrate how platform cooperatives can potentially increase requesters' trust and, consequently, demand, towards them by answering the following research question: *What are the most salient design principles of platform cooperatives that can develop Trust from their requesters*?

By empirically testing four hypotheses on the context of European OLPs, more specifically Food Delivery Platforms, this research can provide important insights which may help to implement a "fairer" alternative to current capitalist platforms, in order to ensure the simultaneous offer of both good services for requesters and, especially, better working and living conditions for gig workers. The following section of the study reviews relevant previous studies from various streams of literature to provide a conceptualization of the main variables of interest and develop relative hypotheses. The dependent variable is identified in *Requesters' Trust*, while four central features of cooperative OLPs, namely, *Workers' Voice, Training, Job Security*, and *Algorithmic Transparency*, as Independent Variables, are suggested to have an influence on it. The third section describes the preliminary design of our research, proposing provisory measures and methods of operationalization of variables used to test our assumptions in the empirical context. The fourth section discusses processes of cognitive and technical validation of measures, which represent the central fulcrum of the study, constituting the bases for the data analysis. After revising measures and variables in accordance with the relevant validity tests, results of the analysis and the assessment of our hypotheses are discussed and commented in the last two sections.

### 2. Theory and Hypotheses

The first part of this section provides a deeper and clearer understanding of the concepts of "Trust" and "Trustworthiness" in the existing literature. These two concepts and the connection between them are explained by drawing together insights from two streams of work: Organizational Trust Research and Literature on Trust in Online Labour Platforms. There will be explored Trust and Trustworthiness conceptualizations according to different studies in the general organizational context and in the specific context of the sharing economy, basing on the definition of trustworthiness dimensions. Moreover, there are also presented several examples of Antecedents of

Trust in Organizations and in OLPs, placing more emphasis on the field of food delivery platforms. The last part of this section draws on the relevant literature about Platform Cooperatives, in order to individuate four relevant features or design principles adopted by coop-OLPs from which our hypotheses will be developed, and explains how they can be tightly associated with the development of Requesters' Trust by drawing on previous insights from the Trust literature. The literature review focuses on the perspective of Requesters (as trustors), intended as final consumers or food providers, both subject to multiple types of risks while interacting and transacting among themselves through the intermediary (OLP), which is identified as the trustee (Akhmedova et al., 2021; Ter Huurne, 2019; Pavlou & Gefen, 2004; Falahat et al., 2019; Lu et al., 2010).

### 2.1 Trust in Organizations

Trust is a fundamental driver of the relationship between an Organization and its Stakeholders, since it helps to reduce relational uncertainties, complexity, and transactional costs for both parties (Kramer & Tyler, 1996; Lane & Bachmann, 1998). Trust is operationalized in different ways by different authors and no universal trust definition has still found acceptance amongst scientists over the years (Mühl, 2014). However, as already mentioned in the introduction, the most common formulation of Trust in the relevant literature is the one attributed to the study of Mayer et al. (1995). In line with their definition, this research conceptualizes Trust as a behavioural and psychological state implying the "intention to accept vulnerability, based upon positive expectations of the intentions or behaviour of another party" (Rousseau, Sitkin, Burt, & Camerer, 1998). The need of Trust rises under a condition of relational risk, which is, the risk that the trusting party will not achieve expected positive outcomes if the other party proves untrustworthy (Sitkin & Pablo, 1992; Searle, Den Hartog, Weibel, Gillespie, Six, Hatzakis, & Skinner, 2011). As previously highlighted by Braithwaite & Levi (1998), the initial grant of trust depends indeed on a person's evaluation on another person's trustworthiness. The same logic can be applied to the organizational context. This means that stakeholders, including requesters, would increase their willingness to be vulnerable to an organization if they expected it to perform a positive action aimed at reducing a specific relational risk for them, and these positive expectations are based on requesters' attributions about the trustworthiness of that organization (Mayer et al., 1995; Zaheer, McEvily, & Perrone, 1998; Gillespie & Dietz, 2009; Searle et al., 2011; Pirson & Malhotra, 2011). The study of Mayer et al. (1995) identified three dimensions of Interpersonal Trustworthiness, which are often mentioned in many recent studies, namely, Ability, Benevolence, and Integrity. Ability is that "group of skills, competencies, and characteristics that enable a party to have influence within some specific domain". In other words, it reflects a trustee's capability of performing the behaviour at hand (Ter

Huurne, 2019). Benevolence is "the extent to which a trustee is believed to want to do good to the trustor, aside from an egocentric profit motive". Integrity can be seen as "the trustee's adherence to a set of principles that the trustor finds acceptable" (Mayer et al., 1995). Drawing on Schoorman et al. (2007), Gillespie and Dietz (2009) explained how these dimensions can be also applied to the organizational level of analysis. They defined "Organizational Ability" as "the organization's collective competencies and characteristics that enable it to function reliably and effectively to meet its goals and responsibilities", "Organizational Benevolence" as "an organization's genuine care and concern for the well-being of its stakeholders", and 'Organizational Integrity' as "an organization's consistent adherence to moral principles and codes of conduct acceptable to stakeholders" (Gillespie & Dietz, 2009; Searle et al., 2011). Together, these three dimensions can form an overall assessment of an individual's trustworthiness (Schafheitle, Weibel, Meidert, & Leuffen, 2020). Hence, it can be said that if requesters perceive the simultaneous presence of Ability, Benevolence, and Integrity in an Organization, their perception of the trustworthiness of that organization would increase. Perceived organizational trustworthiness is crucial to determine a stakeholder's decision to accept vulnerability (Zaheer et al., 1998; Searle et al., 2011; Pirson & Malhotra, 2011). Therefore, an increase in the three trustworthiness dimensions will be positively associated to the willingness of Requesters to trust an organization, because it leads to a reduction in perceived relational and transactional risks. Several authors and researchers over time were able to identify a wide variety of elements that may increase organizational trustworthiness through a link with one or more of those three dimensions, referring to them as "Trust Antecedents". Searle et al. (2011), for example, argued that the use of high-involvement HR practices towards employees is directly related to the development of employees' Trust in a company, since it can be seen as a strong signal of the organization's Benevolence with respect to its stakeholders, while, in turn, having an accurate performance management system demonstrates that management is competent in managing the workforce (Ability). Also, Gillespie & Dietz (2009) showed that the fairness and consistency of design structures, policies, and implementation processes inside an organization are indicative of Benevolence and Integrity, while coherence and effectiveness imply Ability. These studies demonstrated how structures, policies, processes, and design principles adopted by an organization can powerfully influence organizational trustworthiness, reducing perceived risks for stakeholders (Gillespie & Dietz, 2009). In summary, previous studies proposed several elements that can be associated with the perceived trustworthiness of an organization and, subsequently, the level of trust showed by their stakeholders, through a direct connection with the three Trustworthiness Dimensions proposed by Mayer et al. (1995). Signals of Ability, Benevolence and Integrity are strongly linked with the reduction of relational and transactional risks for Requesters,

determining their willingness to be vulnerable, namely, to undertake those risks, while relating to the organization. Nevertheless, the perceived trustworthiness of an organization and thus requesters' willingness to trust it can also be explained by using another approach which is still widely used in the literature. Drawing on Lewis & Weigert (1985), the study of McAllister (1995) distinguished between two types of Trust: Cognition-based and Affect-based Trust. Trust has cognitive foundations when the evidence of Trustworthiness is constituted by signals of reliability, competence, and responsibility, meaning that the trustee, as an individual or an organization, will be able to reflect the trustor's expectations about performing a specific activity or achieving a specific goal. Affective foundations of trust consist in emotional links between individuals, meaning that the Trustworthiness of a party will be assessed basing on "moral" perceptions of the motives of others' behaviour (McAllister, 1995). The distinction between the two foundations of Trust depends on the dimensions constituting the basis of Trustworthiness, which can be associated with the ones highlighted by Mayer et al. (1995). Drawing on these insights, it can be said that Cognition-based Trust in an Organization develops when Requesters increase their perceptions of Organizational Ability, namely, competence and reliability in functioning, while Affect-based Trust is more linked with perceptions of Benevolence and Integrity. As shown by McAllister (1995), demonstrating interpersonal care and concern for others, and adhering to "ethically" acceptable principles and values may be critical for the development of affect-based trust. Therefore, to sum up, the development of Trust in the relationship between Requesters and Organizations depends on requesters' attributions about the trustworthiness of the organization, which can be assessed basing on three dimensions: Ability, Benevolence, and Integrity. Trust can be Cognition-based or Affectbased, according to the foundations of Trustworthiness. An increase in Organizational Trustworthiness is always associated with a reduction of a particular perceived risk for stakeholders, which leads to an increased willingness for them to take that risk. The existing literature has highlighted several factors in an organization which are linked to Trustworthiness and Risk reduction for Requesters (Trust Antecedents). Moreover, Trust can act as an important catalyst in many buyer-seller transactions, since it provides buyers with high expectations of satisfying exchange relationships (Ba & Pavlou, 2002). Whether they perceived a lower relational and transactional risk due to a higher organizational trustworthiness, requesters would raise their intentions to be vulnerable to the actions of the organization and, consequently, as many researchers showed, their willingness to interact and transact with it would be affected (Morgan & Hunt, 1994; Zaheer et al., 1998; McKnight & Chervany, 2001; Pavlou & Gefen, 2004; Lu et al., 2010).

#### 2.2 Trust in Online Platforms

In more recent years, the Trust literature has also drawn its attention to the world of "virtual" organizations, namely, Platforms of E-Commerce, to define which factors can mainly influence the development of Trust towards these types of companies. However, very few empirical studies on trust have been done in the context of sharing economy (Kamal & Chen, 2016). Trust plays an important role in online relationships, where risk, uncertainty, and interdependence are very prominent elements (McKnight & Chervany, 2001). A lack of trust is indeed one of the main reasons for which requesters and providers not to engage in web services (Petrovic et al., 2003; Sun, J., Sun, Z., Li, & Zhao, 2012). Most risks for requesters derive from situations of information asymmetry, given by the nature of their relationship, which may give rise to opportunistic behaviour from sellers such as misrepresentation of product quality (Ba & Pavlou, 2002; Pavlou & Gefen, 2004). Hence, the relevance of trust in the online context is high, since it helps to reduce the risk associated with the complexity, uncertainty, information asymmetry, and inherent risks of online transactions, overcoming or supressing appendant consequences (Akhmedova et al., 2021; Schoorman, Mayer, & Davis, 2007; Mittendorf, 2016). The study of Hawlitschek, Teubner, & Weinhardt (2016) applied the Trust framework proposed by Mayer et al. (1995) to the context of the Sharing Economy, referring to the three trustworthiness dimensions as crucial predictors of both buyers and sellers' trusting behaviours towards an Online Labour Platform (OLP). They defined a platform's ability as a "competence or qualification for seamless communication and service operation", which is negatively related to the risk of unsuccessful transactions for requesters (Hawlitschek et al., 2016). Zhu, So, & Hudson, (2017) also mentioned the concept of "Selfefficacy" of an online ridesharing platform, which is meant as "the beliefs that one's capability can successfully perform ridesharing through a mobile application" and can be closely connected to the Ability dimension (Bandura, 1986; Zhu et al., 2017). Meanwhile, aspects such as reliability, especially regarding data privacy, or safeguarding of stakeholders' interests (e.g., legal certainty and payment safety) can be linked to the platform's integrity and benevolence dimension (Hawlitschek et al., 2016). Those dimensions show a strong negative link with multiple relational risks for both sellers and consumers, such as privacy or safety risks. Thus, increasing the level of Ability, Benevolence, and Integrity of an Online Labour Platform will increase the willingness of requesters to be vulnerable to those risks, namely, to trust the platform. Many authors were able to identify examples of structures, features, principles, or actions adopted by OLPs which may be signals of Ability, Benevolence, or Integrity, and that may be critical for the development of Requesters' Trust. One of the most mentioned Trust Antecedent in the OLP literature is the perceived quality and usefulness of a website/application, which has been associated with the perception of

information completeness and accuracy (Chen et al., 2014; Akhmedova et al., 2021). A requester's perception of website quality will influence her or his trust in an intermediary (OLP) because of a lower perceived risk of unsafe/fraudulent transactions or opportunistic behaviours by the seller (Akhmedova et al., 2021; Ha & Liu, 2010; Ert, Fleischer, & Magen, 2016; Yoon & Occena, 2015; Chen et al., 2014). Hence, it can enhance a platform's trustworthiness by representing a strong signal of platform's Ability, in terms of perceived competence and reliability in operating (Mayer et al., 1995; Hawlitschek et al., 2016; Ter Huurne, 2019), and can thus represent an important base for the development of Cognition-based Trust (McAllister, 1995; Chen et al., 2014). Perceptions of Structural Assurances, Safety Measures, Payment Guarantees, and Feedback Mechanisms are also linked to perceptions of an OLP's Ability, but may show connections also with Benevolence and Integrity dimensions (Lu et al., 2010; Ba & Pavlou, 2002; Hawlitschek et al., 2016; Akhmedova et al., 2021). This means that if requesters believe that a platform will institute and enforce fair rules and procedures, providing recourse for buyers to deal with seller opportunistic behaviour, they would increase their level of trust in that platform (Pavlou & Gefen, 2004). Moreover, the relevant literature about Trust in OLPs highlighted that an important Trust Antecedent associable to a platform's Benevolence and Integrity is represented by all those principles, practices, and structures which constitute the so-called "decent work" for gig workers (Smith, Goods, Barratt, & Veen, 2021; Giaconi, Giasanti, & Varva, 2022). As explained by Vandaele (2022), today's OLPs, especially food delivery platforms, are facing increasing pressure from various stakeholders exposing their "vulnerability" in those markets, including restaurants and their customers. This pressure comes from the need of requesters to find an alternative to current OLPs which can comply to morally acceptable principles and values, different from the profitmaking ones pursued by Uber or other "giants" in the market. The marketing literature on 'ethical consumption' shows that consumer behaviours are informed by multiple ethical considerations, including Gig workers' treatment, because of their "moral sensitivity" (Smith et al., 2021). Unions and labour-rights campaigners are already seeking to use the lever of ethical consumption to build support for better working conditions, which can be considered "decent work" (Healy et al., 2020; Smith et al., 2021). In other words, requesters can actively act upon their human values as consumer-citizens, which move beyond individual consumption choices because of their "ethical and social responsibility", indicating a significant relationship between moral awareness and consumption preferences (Vitell, 2015; Smith et al., 2021). As shown by Kroeger (2017), correcting the "moral failures" of an organization through the promotion of values like honesty, cooperation, and reciprocity is a fundamental cue to indicate a platforms' Integrity, in terms of compliance with ethical principles acceptable to requesters. Moreover, providing entitlements such as minimum pay and representation to gig workers would enhance the level of requesters' trust in OLPs by representing a signal of the platform's Benevolence towards its stakeholders, reducing relative relational and transactional risks (Smith et al., 2021; Searle et al., 2011). From another perspective, ensuring more rights and decent working conditions to gig workers can be strictly related to the concept of "procedural justice", intended as the general perception of fairness, consistency, and reliability of organizational procedures to make decisions, which is one of the strongest predictors of Trust at organizational level (Thibaut & Walker, 1975; Searle et al., 2011; Kroeger, 2017). Procedural Justice shows connections with both Benevolence and Integrity dimensions, also representing an important antecedent to Affect-based Trust. Nevertheless, as a signal of reliability of decisions and practices, it can be also linked to the Ability dimension, and it may be relevant for the development of Cognition-based Trust (McAllister, 1995). Therefore, existing literature shows that a better ethical conduct towards gig workers can increase a platform's trustworthiness since requesters can be "sensitive" to human needs, and may change their consumption preferences according to their "moral sensitivity" (Smith et al., 2021). The existent link between "decent work" elements and the three trustworthiness dimensions suggested by Mayer et al. (1995) will hence result in an increased willingness of requesters to be vulnerable to an Online Labour Platform. Accordingly, because of the relation between Trust and Transaction/Purchase intentions (Pavlou & Gefen, 2004; Lu et al., 2010; Ha & Liu, 2010), it can be said that online labour platforms can increase their success and popularity in a market by simply promoting and implementing values that are "ethically acceptable" for requesters, meaning that "good ethics" can also mean "good business" in the long run (Vitell, 2015; Healy et al., 2020; Smith et al., 2021).

### 2.3 Principles of Platform Cooperatives related to Requesters' Trust

Today's Online Labour Platforms are known for their discriminatory practices, excessive algorithmic surveillance, poorer working conditions (namely, employment uncertainty, irregular earnings and unstable working hours), and fewer social rights and representation for gig workers (Scholz, 2017; Schor, 2021). For this reason, the gig economy has been strongly criticized by stakeholders from a social and ethical perspective (Scholz, 2016; Healy et al., 2020; Vandaele, 2022). As suggested by Eum (2019), most problems regarding gig workers' conditions derive from their "Non-Standard Employment (NSE)" condition, since most platform workers are required to "agree" that they are self-employed or "independent contractors", not employees, renouncing to several rights and benefits (Berg, Furrer, Harmon, Rani, & Silberman, 2018; Bunders, 2021; Meijerink, Keegan, & Bondarouk, 2021). Therefore, in many European countries, gig workers are trying to face these issues through various forms of collective action, including the promotion and

development of Worker-owned Gig Platform, also called Platform Cooperatives (Eum, 2019; Bunders, 2021; Bunders et al., 2022). Platform cooperatives are characterized by the fact that "the majority of workers are members, the majority of members are workers [...] who are voluntarily united to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise". (Eum, 2019). In platform cooperatives, gigworkers participate in control and management of the firm, gain a share in profit via ownership of stock, and can benefit from better working conditions, social protections, or employee rights (Conte & Jones, 2015; Johnston & Land-Kazlauskas, 2018; Philipp, Hermes, Schreieck, & Böhm, 2021; Bunders et al., 2022). Hence, workers' membership in cooperative OLPs is often directly related to having a standard employment contract (Eum, 2019). Worker-owned gig platforms are therefore considered an extreme case of collective action, where "gig workers control an entirely different arrangement that grants them access to working conditions and shared benefits they would otherwise not have" (Bunders, 2021). Nevertheless, although they can represent a better solution to existing investor-owned OLPs from an ethical perspective, platform cooperatives are still not popular among requesters in the European context, and this study assumes that this can mainly be caused by a lack of Trust in them (Scholz, 2016; Bunders et al., 2022; McKnight & Chervany, 2001; Pavlou & Gefen, 2004; Lu et al., 2010). As previously mentioned, there can be found several examples of platform cooperatives' design principles that may be linked to the development of Trust from their requesters. Above it is explained that factors like "decent work" (e.g.; Employment and Minimum Pay) and "procedural justice" (consistency and reliability of practices) can represent important Trust Antecedents because of a connection with Mayer et al. (1995)'s trustworthiness dimensions (Searle et al., 2011; Kroeger, 2017; Smith et al., 2021; Giaconi et al., 2022). However, previous studies have not deepened in explaining the reason why worker-owned gig platforms for food delivery are still so behind with respect to capitalist ones in terms of Requesters' Trust. This is because it is still not clear to what extent these factors are present in today's food delivery platforms (such as Thuisbezorgd.nl or UberEats), or to what extent they are linked to the development of trust from the point of view of Requesters, since the relevant Trust literature focuses more on other types of organizations or different stakeholders' perspectives. Therefore, this study contributes to the existing literature by assessing to what degree specific design principles adopted by food delivery platforms can have an influence on the level of Trust shown by their Requesters. Our aim is to test which are the most important principles that platform cooperatives should adopt/improve or delete/limit to stimulate demand and increase their popularity in the market. Among the whole of features internal to Platform Cooperatives that can represent signals of Ability, Benevolence, and

Integrity (Mayer et al., 1995), or that are related to Affect-based or Cognition-based Trust (McAllister, 1995), four main design principles are suggested to impact Requesters' Trust. Hence, our dependent variable is identified in *Requesters' Trust in Online Platform Cooperatives*, intended as "*willingness of requesters to be vulnerable to the actions of a worker-owned gig platform, based on their evaluations on the platform's trustworthiness*" (Mayer et al., 1995; Rousseau, Sitkin, Burt, & Camerer, 1998; Braithwaite & Levi, 1998; Pirson & Malhotra, 2011). The four selected independent variables from which our hypotheses are developed are *Workers' Voice, Training, Job Security*, and *Algorithmic Transparency*, which are explained below.

Workers' Voice The first design principle which is assumed to impact Trust is Gig workers' Voice in the Decision-Making (DM) processes of the OLP. It is known that Platform Cooperatives are characterized by a democratization of Governance mechanisms, through Workers' Membership, Member Control, and Economic Participation (Martin, Upham, & Klapper, 2017; Majee & Hoyt, 2011; Conference, 2022). Very few organizational models can promote worker voice and control more than cooperatives (Johnston & Land-Kazlauskas, 2018). As already mentioned, Workers' Voice in DM can represent an important Trust Antecedent for Requesters, because of various reasons. First, democratic platform governance models can promote the simultaneous enactment of social values (including altruism, social justice, equality, solidarity etc.), environmental values (including harmony with nature and post-materialism) and instrumental values of the capitalist economy (including self-interest, efficiency, financial wealth, and economic rationality), which can be significantly associated with users' level of engagement with the platform (Martin, Upham, & Klapper, 2017). Indeed, a strong form of employee participation in decision making is a derivative moral right, which can be defended basing on values and principles of dignity, health, fairness, and democracy (McCall, 2001). Thus, an increase in Gig Workers' Voice in DM is linked to the promotion of socially and economically acceptable values for stakeholders, representing an important signal of Value Congruence and Integrity from the platform (Mayer et al., 1995; Lane & Bachmann, 1998; Kroeger, 2017). Moreover, as Kroeger (2017) highlighted, Trust in an organization is higher when power and is distributed, rather than concentrated among few individuals, since a decentralization of authority is linked with a more transparent and effective control on members' conduct, through assigned roles and expectations for incumbents and restrictions on discretionary actions (Van Ees & Bachmann, 2006; Gillespie & Dietz, 2009). An increase in the so-called "Structural Assurance" of the platform would hence lead to a reduction in perceived transactional or relational risks for clients, by preventing incompetent and dishonest behaviours (Sha, 2009; Gillespie & Dietz, 2009). In other words, a democratization of the

platform's governance and an increase in gig workers' voice in decision-making can lead to an increased perceptions of Competence and Ability by Requesters (Mayer, 1995; Hawlitschek et al., 2016). Workers' Voice can also be linked to the Benevolence dimension. Bunders et al. (2022) highlighted the fact that, as owners of a cooperative OLP, gig workers can lead to an improvement in working conditions (the so-called "decent work") and hence demonstrate Benevolent intentions towards stakeholders (Searle et al., 2011; Smith et al., 2021). Accordingly, it can be said that a higher workers' participation and control on a platform represents a strong indicator of Procedural Justice, one of the most important trust antecedents mentioned in the OLP Trust literature, showing connections with all Mayer et al. (1995)'s trustworthiness dimensions (Thibaut & Walker, 1975; Searle et al., 2011; Kroeger, 2017). As previously mentioned, Benevolence and Integrity are fundamental foundations of Affect-based Trust, while Ability is central to develop Cognition-based Trust (McAllister, 1995). Therefore, an increase in Gig Workers' Voice in DM can increase Trust in Requesters by enhancing the platform's trustworthiness, namely, reducing perceived transactional and relational risks for both customers and sellers (Zaheer, McEvily, & Perrone, 1998; Braithwaite & Levi, 1998; Gillespie & Dietz, 2009; Pirson & Malhotra, 2011). Lastly, it is also important to mention that Workers' Voice in DM may show other types of links with Requesters' Trust, namely, through an increase of their Familiarity with the Platform (Lu, et al., 2010; Chen, et al., 2014) or their Perceived Similarity with members (Lu, et al., 2010; Ole Borgen, 2001). Since they are locally owned and controlled, cooperatives promote interaction, both inside and outside the organization. This interaction helps to build familiarity among members and between members and their stakeholders which, in turn, strengthens trust in the community (Majee & Hoyt, 2011). Although prior studies found out that familiarity is distinct from trust (Mittendorf, 2016), this can represent another important Trust Antecedent for requesters, significantly affecting all three trustworthiness dimensions (Lu et al., 2010). An increase in social interactions between the cooperative and its requesters may also affect their sense of identification in the community of members, which Pirson & Malhotra (2011) even recognized as an additional Trustworthiness dimension, since it helps to reduce risks associated with uncertainty and information asymmetry (Ole Borgen, 2001; Lu et al., 2010). Based on these arguments, we therefore hypothesize:

H1: An increase in Gig workers' Voice in the Decision-Making processes of a Platform leads to an increase in Requesters' Trust towards the Platform.

*Training* One of the fundamental principles of Cooperatives established in 1995 by the International Co-operative Alliance (ICA) is *Training* (Majee & Hoyt, 2011; Schneider, 2018;

Conference, 2022). The promotion of education, training, and information has always been a pillar of cooperative enterprises, aimed at explicitly educating members as informed, empowered managers and owners (Schneider, 2018). Training has long been associated with signals of organizational trustworthiness (Gillespie & Dietz, 2009) and with the development of trust in organizations (Tannenbaum & Davies, 1969; Searle et al., 2011). As emphasized by multiple studies, current OLPs are mostly failing to establish actual training or education programs for their gig workers, due to their "NSE" condition (Eum, 2019; Meijerink et al., 2021). Workers who are typically hired as contractors rather than as regular full-time employees do not regularly receive training or psychological support for their activities (Berg et al., 2018). Indeed, research shows that gig worker's training and development are seen as their own responsibility (Meijerink & Keegan, 2019). As highlighted by Räisänen, Ojala, & Tuovinen (2021), this can lead to several consequences for Requesters, such as a low level of control over their quality and efficiency of services. Moreover, classic strategic HR theory argues that high-performance work practices (Huselid, 1995) such as training and employee participation in DM, may develop skills and abilities that employees can leverage in support of organizational goals, hence driving performance, reducing turnover, and fostering employee and customer satisfaction (Kuhn et al., 2021). Liu, He, Jiang, Ji, & Zhai, (2020) support this argument by stating that gig workers will not efficiently fulfil their obligations to requesters when their employer fails to fulfil his psychological contract, concerning their training opportunities, with a significant effect on their task performance (Robinson, 1996). Therefore, an increase in Training offered by the platform to gig workers may be associated with an increase in their work-related skills, knowledge, and competences, namely, perceived organizational Ability (Mayer et al., 1995; Searle et al., 2011). This means that if platforms rise the level of Training offered to gig workers, they will reduce perceived risks of unsuccessful outcomes for both consumers and sellers (Ba & Pavlou, 2002; Hawlitschek et al., 2016) and thus enhance Cognition-based Trust (McAllister, 1995) in them. Meijerink, Keegan, & Bondarouk (2021) emphasized indeed the fact that OLPs may provide training to gig workers so that they can offer high-quality services to meet requesters' expectations and retain them on the platform. Beyond that, training can also show links with Benevolence and Integrity. One of the main causes of work insecurity concerning gig workers in their NSE relationship is the inaccessibility to training opportunities that can develop skills to promote their professional development and career advancement (Eum, 2019). As stated by Yeoman (2014), a just society should seek to make work available to everyone, securing the opportunity to develop important human capabilities to do something worthwhile. Accordingly, training can be considered as one of the principles on which "decent work" is based (Giaconi et al., 2022), representing an important

Antecedent to Requesters' Trust due to their "ethical consumption" behaviours (Vitell, 2015; Healy et al., 2020; Smith et al., 2021; Kuhn et al., 2021). Hence, investment in training and development can be seen as a manifestation of an organizations' benevolence and integrity as it is targeted to improve gig workers' career opportunities and to increase their employability (Waterman, Waterman, & Collard, 1994; Searle et al., 2011). As a demonstration of care and concern about others, an increase in Training can thus be related to the development of Affect-based Trust from Requesters (McAllister, 1995). Furthermore, Gillespie & Dietz (2009) confirmed the fact that the use of training procedures emphasizes personal integrity and organizational values symbolizing trustworthiness to stakeholders. Because of all these reasons, our second hypothesis is:

## H2: An increase in Training offered to Gig Workers by a Platform leads to an increase in Requesters' Trust towards the Platform.

Job Security Cooperatives are also known for guaranteeing their members employment and several benefits and protections related to it (Conte & Jones, 2015; Scholz, 2016; Johnston & Land-Kazlauskas, 2018). Existing examples of platform cooperatives have shown promising results in terms of providing stable jobs and reliable social protections to their members with respect to traditional extractive models (Scholz, 2016). The reason is that, as co-owners of an OLP, gig workers can create and maintain the conditions for Job Security, offering a solution to their precarity and uncertainty at work (Bunders, 2021; Bunders et al., 2022). Employment insecurity is one of the main issues related to on-demand work and, more in general, NSE (Bunders, 2021). It centres on concerns over remaining employed, or the risk of losing income-earning work (Eum, 2019). Several studies supported the argument that Job Security may show direct and indirect links with organizational trustworthiness and the development of Requesters' Trust. First, in line with the study of Liu et al. (2020), it can be said that there is a relationship between Job Security, as an element of employers' psychological contracts, and perceived organizational Ability (Mayer et al., 1995), given by the level of gig workers' organizational commitment and performance. Many studies previously demonstrated the existence of a causal relationship between Job Security and workers' psychological well-being and job satisfaction which, in turn, determines performance (Witte, 1999). Yousef (1998) argued for example that the more individuals are satisfied with job security, the more they will be committed to their organizations. Moreover, existing literature also shows that the use of contingent or precarious labour can negatively affect attitudes and behaviours of standard employees, having an influence on commitment, performance, and trust (Davis-Blake & Broschak, 2009; Kuhn et al., 2021). Hence, because of its links with organizational effectiveness

(Greenhalgh & Rosenblatt, 1984), an increase in Job Security may be associated with a higher perceived organizational Ability by requesters, thus determining the development of Cognitionbased Trust (McAllister, 1995). Job security may also be related to the Benevolence and Integrity dimensions, thereby, to the foundations of Affect-based Trust (Mayer et al., 1995; McAllister, 1995). The ILO "MNE Declaration" (1977) recognized Employment Security as one of the principles related to the definition of "decent work" (Giaconi et al., 2022; Berg et al., 2018). Scholz (2017) recalled it as well among the main guarantees of a "decent and good work" in the context of digital platforms. As mentioned multiple times, the "moral sensitivity" of requesters determines a relationship between workers' conditions and trust in OLPs (Smith et al., 2021). Ensuring Job Security to gig workers can represent a demonstration of the platform's Integrity and Value congruence, since it signals the adherence to several principles like honesty, fairness, and justice, which requesters find morally acceptable (Mayer et al., 1995; Searle et al., 2011; Kroeger, 2017; Smith et al., 2021). Finally, Job Security may enhance organizational trustworthiness as it can be also seen as a strong signal of the organization's benevolent intentions toward its stakeholders, reducing perceived transactional risks for requesters (Searle et al., 2011). Therefore, Job Security is another fundamental principle adopted by platform cooperatives which can be suggested to impact Requesters' Trust, since it is seen as a signal of the platform's trustworthiness and shows links with both Cognition-based and Affect-based Trust (Mayer et al., 1995; McAllister, 1995). Basing on these insights from various streams of the Trust literature, we can draw up our third hypothesis:

# H3: An increase in Job Security offered to Gig Workers by a Platform e leads to an increase in Requesters' Trust towards the Platform.

*Algorithmic Transparency* The last independent variable which is assumed to influence Requesters' Trust is *Algorithmic Transparency*, intended as clearness and explicitness of information, implying gig workers' prospective and retrospective knowledge about algorithmic management processes (Felzmann, Villaronga, Lutz, & Tamò-Larrieux, 2019). Platforms are continuously facing the pressure from various stakeholders (couriers, customers, regulation) because of the inappropriate and discriminatory use of data performed by algorithmic management. (Vandaele, 2022). Some believe that the use of A.I. to control gig workers has become an *"alienating, almost totalitarian, nightmare"* (Schor, 2021). One of the reasons is that the minimization of human intervention in automated systems is often translated into "opaque" decision-making processes, meaning that the exact process by which an algorithm produces decisions may be complex and inaccessible to the common worker. The decision produced by an

algorithmic system can thus seem unbreakable, erratic, and unpredictable, and workers can be constrained by the inscrutability of this decision-making system (Jarrahi & Sutherland, 2019). Hence, processes and operations performed by algorithms should be made visible and the connection between data and conclusions must be open to assessment, in order to avoid several detrimental consequences on gig workers (Pasquale, 2015; Gal, Jensen, & Stein, 2020; Vandaele, 2022). What is known is that current platform cooperatives can benefit members by ensuring them voice and power in algorithms' working (Bunders et al., 2022). Cooperative labour platforms can involve gig workers from the moment of the programming of the platform and along their usage of it, providing protection against arbitrary practices, avoiding an excessive control on workers, and building economies that are both transparent and competitive (Scholz, 2016; Schneider, 2018). If workers earn ownership of trained AI systems, they can train them to efficiently replace their labour, positively adjusting their behaviours and offering benefits to both workers and requesters (Sriraman, Bragg, & Kulkarni, 2017; Kuhn et al., 2021). Therefore, Algorithmic Transparency can be associated to Requesters' Trust in multiple different ways. First of all, the use of opaque algorithmic processes in organizations can create a vicious cycle of ethical challenges for platforms, limiting people's ability to flourish and to cultivate their virtue (Gal et al., 2020). Scholars claim that algorithmic management reduces autonomy and value for workers through many means, such as automated wage theft, decreased human sensemaking when algorithms limit human freedom, information asymmetries that impact workers' leeway to make optimal decisions, and disciplining without space for personal growth and development (Meijerink & Bondarouk, 2023). According to Yeoman (2014), freedom, autonomy, and dignity are fundamental moral values that an organization should respect to guarantee meaningful work to its employees. Providing a more transparent algorithmic management through, for example, "hybridization" and employee involvement (Scholz, 2016; Gal et al., 2020), would enhance a platform's trustworthiness by symbolizing that the management cares about employee well-being (Benevolence) and representing an organization's Integrity (Mayer et al., 1995; Grover & Crooker, 1995; Searle et al., 2011). Indeed, ensuring algorithmic transparency can drive requesters' ethical consumption since it indicates a significant improvement of their working conditions, mostly affected by algorithms' functioning (Jarrahi & Sutherland, 2019; Healy et al., 2020; Gal et al., 2020; Smith et al., 2021), and it may thus represent one of the possible antecedents of requesters' Affect-based Trust (McAllister, 1995). Furthermore, reframing algorithms in a way that enables gig workers to develop their virtue, freedom, and dignity can also contribute to stabilize and diffuse new organizational capabilities in order to meet requesters' needs (Adler & Borys, 1996; Gal et al., 2020). Gal et al. (2020) highlighted that algorithmic opacity can diminish organizational members' possibility to understand the logic of the

decisions made about them and their practices, hindering their ability to develop and improve their working skills. This may suggest the existence of a causal relationship between Transparency and Ability, and hence between Transparency and Cognition-based Trust (Mayer et al., 1995; McAllister, 1995). They also argued that the application of hybrid algorithms, namely, trained and supported by humans, can lead to an improvement the work experience of organizational members, which reduces their stress levels and increases their job satisfaction (Gal et al., 2020). The limited autonomy resulting from an opaque and fully automatized algorithmic control may cause overwork, sleep deprivation and exhaustion, with significant negative effects on gig workers' performance (Wood, Graham, Lehdonvirta, & Hjorth, 2019). Hence, an increase of Algorithmic Transparency may enhance requesters' trust by showing a link with Ability, Benevolence, and Integrity, thus reducing relational and transactional risks for both service providers and final consumers (Zaheer, McEvily, & Perrone, 1998; Braithwaite & Levi, 1998; Ba & Pavlou, 2002; Gillespie & Dietz, 2009; Pirson & Malhotra, 2011; Hawlitschek et al., 2016). Therefore, our final hypothesis is:

## H4: An increase in Algorithmic Transparency in Gig Workers' Control by a Platform leads to an increase in Requesters' Trust towards the Platform.

The following section explains how these hypotheses are going to be tested in the context of European food-delivery platforms, representing the trustee, and their requesters (including both food suppliers and final consumers) as trustors. After mentioning initial methods of operationalization and measurement of variables and techniques of data collection, our focus will shift on the validation of our preliminary measures, through cognitive and technical tests. By assessing content validity, construct validity, and reliability of measures we will be able to analyse data and discuss results of the analysis in the final sections. Finally, our results will enable us to investigate whether these four "gig worker-friendly" design principles of platform cooperatives may also be significantly associated with the level of Trust in the platform provided by requesters, giving important insights for future research. Our theoretical model, which depicts the relationships between our four independent variables and Requesters' Trust, is presented below:





### 3. Research Design

### 3.1 Method

The four hypotheses of this research are tested through a factorial survey design, a peculiar form of vignette study. A vignette study is a research methodology that involves presenting participants with a brief description of a particular situation or behaviour and asking them to make judgments or provide responses based on that hypothetical but realistic scenario. A factorial survey design is a type of vignette study based on the development of a set of several different hypothetical scenarios or vignettes, each of which varies in one or more factors of interest, representing our variables in question. These factors are systematically manipulated in order to test the four different hypotheses. The advantage of a factorial survey design is that it allows researchers to isolate the effects of specific factors of interest and to examine how these factors interact with each other, thereby enhancing experimental realism and supporting both internal and external validity of results (Aguinis & Bradley, 2014). Hence, a factorial survey design enables us to effectively operationalize and measure our four independent variables hypothesized to impact Requesters' Trust as dependent variable. However, in a survey-based study, researchers need to design and develop questionnaires which are clear, unambiguous, and allow participants to make correct and reasoned judgements, before presenting the survey to them (Drennan, 2003). Because of these reasons, the initial formulation of the vignettes needs to be validated and revised according to the results of different pre-tests, in order to ensure that questionnaires are suitable for data collection and analysis. Furthermore, we also want to assess the validity of Likert scales used to measure *Requesters' Trust*, since the original scales used by previous studies have been adjusted and adapted to the context of

this research. Therefore, the cognitive and technical validation of the preliminary scales presented in the following section can enable us to identify whether they succeed or fail in achieving their measurement purpose, and thus is necessary to be conducted before proceeding with the actual data analysis (Collins, 2003).

### 3.2 Measures

The dependent variable *Requesters' Trust* and independent variables *Workers' Voice, Training, Job Security,* and *Algorithmic Transparency,* are measured using the following scales.

Requesters' Trust towards a Platform Cooperative The degree of Trust that Requesters (restaurants and final consumers) show towards a platform cooperative is expressed as a decomposed index of Competence and Goodwill Trust, as two aggregate factors explaining trustworthiness dimensions (Mayer et al., 1995; Schafheitle et al., 2020). The two constructs can also be associated with the two categories of Trust developed by McAllister (1995), Cognitionbased Trust (which relies on perceptions of organizational Ability and Competence) and Affectbased Trust (which builds on perceptions of Benevolence and Normative Integrity). In order to confer content validity to Trust measures, the scale used by Searle et al. (2011) and Schafheitle et al. (2020) was applied to our context. Accordingly, recent studies conceptualized trust as requesters' willingness to be vulnerable to a cooperative food delivery gig platform, based on their evaluations on the platform's trustworthiness, which is related to perceptions of Ability, Benevolence, and Integrity (Hawlitschek et al., 2016). To provide a measure for the overall level of Trust in an organization, Searle et al. (2011) developed a 1-item scale by directly asking participants the extent (from 1 to 7) to which they would trust the company. In our case, the focus shifts to requesters' willingness to pay a "surplus" (additional price) for the services offered by the platform in question, which is used as a distinct measure for Requesters' Trust. Participants are hence asked to express the extent to which they would pay a surplus to the platform basing on its design principles, ranging from 1 (not at all) to 7 (extremely likely) in a Likert Scale (see Appendix [1]). This is justified in terms of content validity by the link between requesters' trust based on evaluations of a platform's trustworthiness and purchase intentions towards the platform, as a mediator in the online relationship between consumers and suppliers (Gefen, 2002; Hawlitschek et al., 2016). When operationalizing perceived organizational trustworthiness, Searle et al. (2011) implemented a twofactor structure, regrouping items into "Ability" and "Trustworthy Intentions" (as a comprehensive dimension capturing both Benevolence and Integrity dimensions) as previously proposed by Cook and Wall (1980). In line with the study of Schafheitle et al. (2020), items belonging to the Ability

dimension are clustered into the Competence Trust factor, since Competence Trust is based on requesters' positive perceptions a platform's Ability (Mayer et al., 1995; Hawlitschek et al., 2016; Ter Huurne, 2019). Following the same reasoning, Goodwill Trust, which is based on behavioural and moral perceptions towards an individual or organization, captures items belonging to the Benevolence and Integrity dimensions (Mayer et al., 1995; Hawlitschek et al., 2016; Ter Huurne, 2019; Schafheitle et al., 2020). A sample item for Competence Trust is: "I think that this platform is successful in effectively and efficiently delivering my food", while a sample item for Goodwill Trust is "I think that this platform cares about my welfare and my satisfaction". The reason why Trust is measured by using trustworthiness expectations scales is the fact that trustworthiness beliefs are crucial antecedents of Trust-related behaviours, and this confers criterion validity to our measures (Mayer & Davis, 1999; Dietz & Den Hartog, 2006). The Competence Trust construct includes 3 items, while the Goodwill Trust scale comprises 7 items, which are fully presented in Appendix [1]. Moreover, to test whether the two dimensions of *Competence* and *Goodwill* trust were technically identifiable, an Exploratory and Confirmatory factor analyses were performed. Results of Principal Component Analyses are discussed in Chapter 4, which includes the assessment of Construct Validity and Reliability of measurement scales for Requesters' Trust.

*Measurement of Independent Variables* Each independent variable which is assumed to impact *Requesters' Trust* is represented by a particular condition which can be present (as a treatment), or not (as a control), in the vignette. Every different combination of these conditions corresponds to a particular setting of variables which is evaluated by each respondent, to whom 3 vignettes are randomly assigned and presented. This is an example of the first version of a vignette that was intended to be used in our study, introduced by a preliminary description of the hypothetical situation:

Mr. Petrella wants to order a pizza from an online food-delivery app. He can only choose between 3 different platforms, but he is quite uncertain about which alternative to pick. While selecting the best food-delivery app to order on, Mr. Petrella wants to be sure that that platform is currently guaranteeing appropriate treatment to gig workers, since current platforms are mostly lacking in providing fundamental rights and benefits constituting the bases for decent work, with several consequences on gig workers' well-being and performance.

If you were Mr. Petrella, how would you assess these 3 platforms basing on their main design principles?

[Platform 1 does not offer to gig workers the right to participate in the decision-making processes relating to issues that affect their work and the interests of managers/owners of the platform, leaving all the power to executives. The platform currently offers gig workers online learning and training activities to develop their knowledge and skills, to motivate them in the workplace, and to integrate them in the organization. In this platform, gig workers are currently very

uncertain about the future of their position, since the company does not grant them a sufficient level of job security. Lastly, the platform shows a very high level of algorithmic transparency, since workers have a broad amount of information about algorithms' functioning and reasoning behind management decisions.]

In this hypothetical scenario, the variables selected as treatments are *Training* and *Algorithmic* Transparency, while control variables are Workers' Voice and Job Security. Treatments and Controls respectively assume the values 1 and 0. Thus, depending on the presented vignette, each independent variable can take on two values to be varied, resulting in a  $2 \times 2 \times 2 \times 2$  experimental setting. Therefore, there is a total of 16 possible vignettes for the study. After reading each vignette, participants are asked to make a choice by answering questions or providing ratings related to the presented scenarios. More specifically, respondents are invited to express their perceptions of trustworthiness towards a specific food delivery platform and, subsequently, their willingness to accept vulnerability. The following table fully illustrates how the four independent variables were formerly represented in the vignettes, basing on the relative definitions and measurement scales drawn from previous studies (see *Table 1*). As mentioned earlier, the central focus of the next sections of the paper consists in the validation process of our measures, rather than the effective test of our hypotheses and the relative discussion. The reason why content validation regarding independent variables is important is that the use of these preliminary constructs in the vignettes still does not find a concrete justification in the literature, hence may cause misunderstanding, inconsistent interpretations, and biases in the responses and judgements provided by participants (Collins, 2003; Drennan, 2003).

Therefore, testing content validity, construct validity, and reliability of measurement scales is crucial to address issues related to the formulation of the vignettes/survey questions and to identify potential sources of measurement error (Collins, 2003). The fourth section shows how the proposed measurement scales are validated and revised through a cognitive pre-test (for content validity) and a technical test for validation (including construct validity and reliability tests).

TABLE 1: PRELIMINARY MEASUREMENT OF INDE	PENDENT VARIABLES IN THE VIGNETTES
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Independent Variable	Verbal representation	Reasoning	Experimental condition	Numerical representation
Workers' Voice (H1)	Platform X offers to gig workers the right to participate in the decision-making processes relating to issues that affect their work and the interests of managers/owners of the platform through a democratization of governance.	Gig workers' participation in the decision -making processes relating to issues that affect their work and the interests of managers/owners of the platform through a democratization of governance (see Wilkinson et al., 2014; Heiland, 2020)	Treatment = gig workers' participation in decision- making processes	1
	Platform X does not offer to gig workers the right to participate in the decision-making processes relating to issues that affect their work and the interests of managers/owners of the platform , leaving all the power to executives.		Control = no gig workers' participation in decision - making processes	0
Training (H2)	The platform currently offers gig workers online learning and training activities to develop their knowledge and skills, to motivate them in the workplace, and to integrate them in the organization.	Provision of skill training and online learning opportunities to integrate, motivate, develop, and familiarize gig workers with organization al goals, strategy, culture, and operations (see Behera & Gaur, 2022).	Treatment = training and learning opportunities are provided to gig workers	1
	The platform is currently lacking in providing a ny learning or training activit y to develop, motivate, and integrate gig workers in the organization .		Control = training and learning opportunities are not provided to gig workers	0
Job Security (H3)	In this platform, gig workers are very confident about the stability and continuance of their job, since the company offers them a high level of job security.	Individual worker's cognitive appraisal of the future of his or her job in relation to the perceived level of stability and continuance of that job ( see Probst, 2003)	Treatment = gig workers' perception of stability and continuance of job	1
	In this platform, gig workers are currently very uncertain about the future of their position, since the company does not grant them a sufficient level of job security.		Control = no gig workers' perception of stability and continuance at job	0
Algorithmic Transparency (H4)	Lastly, the platform shows a very high level of algorithmic transparency, since workers have a broad amount of information about algorithms' functioning and reasoning behind management decisions.	Workers' awareness and understanding about Al system's functioning, rea soning, and inner logic (see Yu & Li, 2022; Zhao et al., 2019)	Treatment = gig workers are aware about algorithmic processes	1
	Lastly, in this platform, workers are not aware of algorithms' functioning and reasoning behind management decisions.		Control = gig workers are not aware about algorithmic processes	0

### 3.3 Sampling

Data have been collected from 14/07/2023 to 24/07/2023. The questionnaires were developed and presented to the respondents through Qualtrics, an online survey tool for the faculty of Behavioural, Management and Social Sciences at the University of Twente. The questionnaires were presented through a web link which was directly shared by the researcher among social networks (e.g., LinkedIn) or virtual groups, where most members are currently students at the University of Twente (Enschede, NL). At the beginning of the survey, a short introduction explained the nature and purpose of the research and the Informed Consent procedure. After that, 3 randomly assigned vignettes were presented and asked for assessment. Questionnaires were anonymous, with the exception of specific personal information which were particularly relevant for the data analysis. In line with the study of Hawlitschek et al. (2016), participants were classified into food consumers and suppliers, both representing categories of platforms' requesters. Instead of presenting two different blocks of questionnaires, we operationalized this distinction by including Requester Status as a control variable. Other control variables used are Gender, Age (in classes), Country, and Trust Propensity, intended as the disposition of requesters to Trust online vendors (Lee & Turban, 2001; Searle et al., 2011; Dohmen et al., 2011; Hawlitschek et al., 2016; Akhmedova et al., 2021). On a

gross sample of 104 people, 66 have fully filled the survey. Hence, we were able to collect 3 x 66 = 198 factorial cases in total as units of our measurement validation and data analysis. Altogether, our sample mainly consisted in male requesters (40 out of 66), mostly aged between 18 and 24 (33 out of 66). Participants belong to different ethnic origins, but every respondent currently lives in a European country. The majority resides in Italy, the researcher's home country (39 out of 66), and in the Netherlands (15 out of 66), while other respondents' countries of residence are Belgium (4), Germany (4), Luxembourg (2), France (1), and Switzerland (1). Over a total of 66, only 4 identified themselves as restaurant owners, while 62 belong to the "food consumers" category. Overall, the average reported level of Trust Propensity is between 4 and 5 in the 7-points Likert scale. Appendix [2] shows the frequency distributions for our control variables and an overview of vignette frequencies (different combinations of variables) resulting from survey randomization.

### 4. Validation of Measures

### 4.1 Cognitive pre-test for validation

The cognitive validation of a survey includes different types of pre-tests, which can be conducted before progressing with the actual data collection to ensure that respondents are able to understand and answer to the questions in a consistent and purposeful way (Collins, 2003). The so-called "question-and-answer model", derived from cognitive psychology, suggests that there are four actions that respondents need to perform while answering to a questionnaire, which fall under the domains of Comprehension, Retrieval, Judgement, and Response (Tourangeau, 1984). Hence, before presenting vignettes/questionnaires to participants, the researcher has to be sure that all of them can understand the questions, retrieve the necessary information to make a reasoned and feasible judgement and respond to the question in the same way, and in a way the researcher intended (Collins, 2003). Cognitive interview is a diagnostic tool used to test how respondents perceive and interpret questions, and to identify potential issues that they may face in answering survey questionnaires (Gerber & Wellens, 1997; Drennan, 2003). This study uses Cognitive Interviews as an instrument to perform the cognitive pre-test for "face" and content validation of questionnaires, leveraging on experts' knowledge about the adequateness of vignette constructs to minimize measurement and response error. In accordance with the "six-steps" approach for survey validation proposed by Collingridge & Gantt (2008), our content validation process starts with conducting three cognitive interviews to three experts with technical knowledge, and business and behavioural design background. The anonymized interviewees are identified into three managers

and/or directors of an important Dutch digital agency, which provides a wide range of online services for worldwide organizations. Their contribution and expertise are crucial for cognitive validation since they all are particularly competent in the field of Online Labour Platforms, thus capable of examining whether the constructs used in our survey can fully represent the variables and the problem in question (Aithal A., & Aithal S., 2020). The full list of the questions used for the interviews are presented in Appendix [3]. Content validation is useful not only to assess the adequacy of our vignettes, but also to ensure that respondents are enabled and confident to perform a realistic choice or judgement in the hypothetical decision-making situation presented in the survey. Cognitive validation is most worth when used in combination with other validity and reliability measures (Drennan, 2003), such as technical tests for Construct Validity and Internal Consistency, which are performed after the first revision of vignettes. The reason is that the sole use of cognitive interviews for content validation can also rise many problems deriving from the qualitative nature of results, which makes them not completely reliable and accurate (Collins, 2003). However, despite these limitations, Cognitive Validation represents a crucial step to identify possible measurement errors in our preliminary vignettes and to face potential issues relating to the Comprehension, Retrieval, Judgement, and Response domains. Therefore, results of cognitive interviews can allow us to revise the questionnaires according to managers' expertise before presenting them to respondents and proceed with the data collection process. The revised vignettes, basing on content validation, on which our measurement validation and data analysis will draw are presented below.

### 4.2 Revision of vignettes basing on cognitive pre-test

The three cognitive interviews for face and content validation have been conducted via Microsoft Teams during July 2023. The first interviewee of our cognitive pre-test was able to give us useful and important insights about the adequacy of our vignettes in terms of content validation. The exact order of interview questions was not fully respected because the respondent provided a very open and extended argument regarding the development of a hypothetical yet realistic decision-making scenario to present to participants, in order to minimize comprehension, retrieval, judgement, and response errors (Tourangeau, 1984). In particular, the first interview provided relevant practical advice for a clearer verbal representation of the four independent variables, focusing specifically on the concepts of transparency and awareness. According to the respondent, which owns a deep knowledge and expertise on online platforms' design principles, there must be an equilibrium between "demand" and "supply" while designing a platform, meaning that the definition of a certain design principle should match between different points of view (e.g., for both gig-workers

and requesters). Following this reasoning, he was able to provide us with practical examples of the implementation of the four design principles representing our variables in the context of a workerowned gig platform, which could be understood in a common way for all categories of stakeholders, and, in our case, survey respondents. Putting more emphasis on "Algorithmic Transparency", his suggestions helped us to verbalize the variable as a whole of direct and indirect actions performed by the company towards gig workers aimed at increasing their awareness about rules and logics governing algorithms, in a way that can easily be understood by everyone. The reasoning behind this definition is that it is hard for gig workers to fully understand and interpret algorithmic decisions without a more active help from the platform managers. Although the definition partially matches with our preliminary verbalization, the interviewer's advice provided us with a more practical point of view, enabling the enrichment of the Transparency construct with the inclusion of more concrete elements such as "Provision of on-demand support and feedback/review mechanisms", "Clear profile of the company and managers", "Personal Interactions", and "Open and simple explanations about management processes and decisions affecting gig workers", concepts that can also be easily understood by survey respondents. Regarding the other independent variables, the first interviewee provided us with limited yet useful suggestions for improvement. The role of Transparency was highlighted also in the fields of Training and Job Security. Accordingly, the verbalization of the variable Job Security was revised considering the importance of gig workers' awareness regarding the future of their jobs, as well as their rights at work, insurance, social benefits, and guarantees, despite it is not simple to properly define Job Security in an unstable and riskier context like that of food-delivery platforms. Lastly, the interviewee's advice was very useful to develop and improve the verbalization of the *Training* construct, intended as an active investment from the company towards gig workers to improve their knowledge about the platform itself, but also about questions indirectly related to their work, such as street regulations or career opportunities. Even in this case, Transparency plays a great role in the Training definition, which partially confirmed our initial formulation of the construct and enhanced it at the same time. Therefore, the insights provided by the first interviewee were definitely crucial to improve our definitions and make them clearer to respondents, making them identify with gig workers' point of view, thus more prepared and involved while reading vignettes and answering survey question. The second interview followed a more ordered pattern, since most of the intended questions were asked and answered in sequence. This time, the interviewee focused on the clarity of information provided in the questionnaire and on the visualization of vignettes, rather than the specific verbalization of each variable. Her suggestions determined a substantial change in the formulation of vignettes and in the structure of our survey. First of all, she recommended to check useful information in

platforms' websites which could provide a simple and brief verbalization of "gig worker-friendly" design principles from the point of view of requesters. Hence, after exploring several platform websites, such as "Thuisbezorgd.nl"<sup>2</sup> and "Glovo.com"<sup>3</sup>, we were able to find more clear and understandable definitions for our four independent variables, which helped us to reframe the verbalization of vignettes in a more efficient way. Still on this topic, she suggested to focus on the difference between Cooperatives' design principles and capitalist platforms' principles to establish a clearer conceptual distinction between Treatment and Control variables. As an example, regarding the variable Workers' Voice, her advice helped us to put more emphasis on the actual influence on decision-making processes given to gig workers by a democratization of governance in platform cooperatives, which is absent in the case of capitalist companies. After providing positive feedback about the information sheet clarity and the order of presented variables, her focus shifted to the clarification of the decision-maker role for the respondent at the beginning of the survey. While introducing the hypothetical scenario, the description of the situation should make the reader aware that he is going to express a choice, a judgement, about the platform that he prefers. Thus, the introductory part of our vignettes was revised in order to highlight the decision-making situation which respondents are presented to. Moreover, a very relevant advice that she provided was to avoid repetitions and additional information which could influence the respondents' choice, making the introductory part less specific. Hence, she suggested to delete the part of the vignette introduction in which there was a detailed explanation about the willingness of the hypothetical "Mr. Petrella" to ensure that his choice would guarantee adequate treatment and decent working conditions for gig workers, since this statement could cause biases in the respondents' decision criteria. Below is shown an example of how the introduction of vignettes and vignette formulation have been revised after our cognitive pre-test:

Mr. Petrella wants to order a pizza from an online food-delivery app. He can only choose between 3 different platforms, but he is quite uncertain about which alternative to pick.

As if you were Mr. Petrella, please evaluate the 3 platforms and choose the best alternative as a consumer basing on each combination of design principles:

### Platform #1

[The platform does not offer to gig workers a say in the decision-making processes relating to their work and managerial issues. The company is currently investing in online learning and training activities to develop gig workers' knowledge and skills, to motivate them in the workplace, and to integrate them in the organization. In this platform, gig workers are not covered by any insurance and do not receive any perk, benefit, or employment guarantee. Lastly,

<sup>&</sup>lt;sup>2</sup> https://www.thuisbezorgd.nl/en/courier?utm\_source=mainsite&utm\_medium=referral&utm\_content=usermodal

<sup>&</sup>lt;sup>3</sup> https://jobs.glovoapp.com/life-at-glovo/

managers actively provide clear and open explanations about rules and logics behind algorithmic management decisions, through on-demand support, feedback sessions, and personal interactions.]

Finally, the second interviewee recommended to add pictures and images to help respondents visualize the decision-making situation better and be more engaged in answering questions. For example, this advice helped us to integrate the survey with hypothetical screenshots of an order from a delivery app, which can clearly and concretely put the respondent in front of the decisionmaking situation that comes while choosing to order food online. Therefore, the second interview gave us important cognitive insights on the side of scenario visualization and survey structure in order to increase interpretability of vignettes and minimization of response biases as well. Regarding the third interview, the exact order of interview questions was not followed as well, since most feedback provided by the expert on vignette formulation and survey structure was positive and confirmatory. He strengthened other interviewees' statements regarding the summarization of verbal constructs to increase clarity and understandability of information, yet affirming that the preliminary representations of variables were already valid and, in general, quite realistic. While reading the first draft version of vignettes, he felt slightly confused by the excessively complex definition of *Workers' Voice*, which he suggested to shorten by deleting unnecessary details and repetitions, still highlighting the role of democratization in the decision-making processes of the platform. Moreover, he also provided very useful tips to improve the Training definition, conceptualizing it as an act of benevolence of the platform towards its workers, aimed at increasing their knowledge and skills, rather than integrating them in the company's culture. However, this last element was kept to specify that when workers receive more training, they will consequently feel more involved in the platforms' processes, leading to beneficial effects for consumers. In this way, respondents could be able to visualize at most the conceptual link between the four "workerfriendly" design principles and subsequent benefits for requesters (increase in Ability, performance outcomes, and quality of services). In general, he confirmed other experts' thoughts about the verbalization of Transparency and Job Security, recommending to add more practical, yet not too complicated, examples of favourable activities performed by the organization towards gig workers, ideally belonging to the two dimensions. These suggestions are justified by the heterogeneity of respondents, since they can own different backgrounds, statuses, and educational levels within the same broad target group; thus, as continuously highlighted by the three interviewees, it is necessary to find "common" construct definitions that can adapt to everyone's basic knowledge, increasing consistency and accuracy of survey responses. To sup um, the three interviewees were able to leverage on their expertise about platform designing to give us fundamental recommendations to improve the verbalization of our four independent variables, as well as the general structurization of

questionnaires. Changes made on our vignettes contributed to simulate a hypothetical and more realistic decision-making scenario, potentially minimizing measurement and response errors, and consequently increasing response quality. The following table shows how the constructs used in the vignettes were revised and improved basing on the cognitive pre-test for validation.

Independent Variable	Verbal representation	Reasoning	Experimental condition	Numerical representation
Workers' Voice (H1)	The platform offers to gig workers a democratic say in the decision-making processes relating to their work and managerial issues.	Gig workers' participation and influence in the decision-making processes relating to issues that affect their work and the interest s of the platform through a democratization of governance (Cognitive Interviews, 2023; Wilkinson et al., 2014; Heiland, 2020)	Treatment = gig workers' democratic participation in decision-making processes	1
	The platform does not offer to gig workers a say in the decision-making processes relating to their work and managerial issues.		Control = no gig workers' participation in decision - making processes	0
Training (H2)	The company is currently investing in online learning and training activities to develop gig workers' knowledge and skills, to motivate them in the workplace, a nd to integrate them in the organization.	Investment in providing online learning and training opportunities to integrate, motivate, develop, and familiarize gig workers with organizational goals, strategy, culture, and operations (Cognitive Interviews, 2023; Behera & Gaur, 2022).	Treatment = training and learning opportunities are provided to gig workers	1
	The company is not investing in any learning or training activity to develop, motivate, and integrate gig workers in the organization.		Control = training and learning opportunities are not provided to gig workers	0
Job Security (H3)	In this platform, gig workers are covered with a health insurance and provided with perks, benefits, a stable and secure work environment, and employment guarantees.	Individual worker's awareness of the future of his/her job in terms of stability, continuance, rights at work, insurance, social benefits, and guarantees (Cognitive Interviews, 2023; Probst, 2003)	Treatment = gig workers' perception of stability and social guarantees at work	1
	In this platform, gig workers are not covered by any insurance and do not receive an y perk, benefit, or employment guarantee .		Control = no gig workers' perception of stability and social guarantees a t work	0
Algorithmic Transparency (H4)	Lastly, managers actively provide clear and open explanations about rules and logics behin d algorithmic management decisions, through on-demand support, feedback sessions, and personal interactions.	Managers' provision of clear and open explanations about rules and logics behind algorithmic decisions affecting gig workers, though multiple activities (Cognitive Interviews, 2023; Yu & Li, 2022; Zhao et al., 2019)	Treatment = the platform is transparent regarding algorithmic management	1
	Lastly, managers do not organize any activity t o provide support about rules and logics behind algorithmic management decisions .		Control = the platform is not transparent regarding algorithmic management	0

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#### 4.3 Measurement validation

After the cognitive validation phase and the final revision of our vignettes, we were able to start with the data gathering process, followed by the technical (measurement) validation of our survey. The measurement validation can confirm if the items used in the survey to measure Requesters' Trust in platform cooperatives are not only theoretically, but also technically related to the measured variables (Taherdoost, 2016). The use of several statistical tests can help us to validate our measures under a more concrete perspective through the assessment of construct validity and reliability (internal consistency). Regarding criterion validity, which measures how well the survey predicts the intended outcomes in different time frames, the regression output can provide us with a limited interpretation of test scores, since the sample size and the short-term nature of the analysis

do not allow us to accurately assess the predictability of results (Taherdoost, 2016; Aithal A., & Aithal S., 2020). Following the "six-step" process (Collingridge & Gantt, 2008; Aithal A., & Aithal S., 2020), a pilot test of the survey was conducted, using the data collected from our sample. First, data were cleaned and organized in Microsoft Excel, deleting missing values by listwise deletion, and codifying controls (except Country) and independent variables into dummy variables. Subsequently, the cleaned data was uploaded in SPSS software for the assessment of Construct Validity and Internal Consistency, as explained below.

*Construct Validity* When designing a factorial survey, assessing Construct Validity is a mandatory step to test to what extent a specific variable measures or approximates the intended theoretical construct (Evans et al., 2015). Construct Validity refers to the evaluation of a questionnaire by estimating associations of that construct with other variables with which it should be correlated, either positively or negatively (Aithal A., & Aithal S., 2020). If the constructs used in the survey are not validated, this may result in several biases in data analysis and in the interpretation of findings. Assessing construct validity can hence help us to develop a questionnaire in which our theoretical concepts are effectively translated into a functioning and operating reality, ensuring the correctness of our measurement scales and the accuracy of our results (Taherdoost, 2016). Construct Validity includes two components: Convergent Validity and Discriminant Validity. Convergent Validity is established when measures (items) which are conceptually correlated are demonstrated to be in fact correlated (Agarwal, 2013; Aithal A., & Aithal S., 2020). A simple way to assess convergent validity is to estimate and compare correlation coefficients between items belonging to the same theoretical construct in a correlation matrix (Straub, Boudreau, & Gefen, 2004). A rule of thumb is that items that load on posited constructs should show a significant correlation coefficient of at least 0.40 between each other (Taherdoost, 2016), but generally not higher than 0.75. If items are not enough or too much correlated, they should be excluded from the measurement scale. In our case, we would like to have significant and sufficiently high correlation between the three items belonging to the Competence Trust dimension and between the seven items belonging to the Goodwill Trust dimension. Discriminant Validity, instead, tests the extent to which items intended to reflect a construct diverge from those that are not posited to belong to the construct (Straub et al., 2004). In other words, it establishes that constructs that are not conceptually correlated do, in fact, not have any relationship (Taherdoost, 2016). Both convergent and divergent validity can be assessed through factorial validity conducted using principal component analysis, but it cannot prevent methods bias when the researcher uses only one method (Straub et al., 2004; Aithal A., & Aithal S., 2020). For this reason, we aim at establishing Construct Validity by first comparing

coefficients between items in the correlation matrix, and then by conducting both an Exploratory Factor Analysis (EFA), using Varimax rotation method, and a Confirmatory Factor Analysis (CFA), using Promax rotation. Therefore, by testing assumptions for factorability, assessing factor loadings, establishing model fit, and interpreting results, we are finally able to determine whether our theoretical constructs (Competence and Goodwill Trust) are technically valid measures for our dependent variable *Requesters' Trust*.

Internal Consistency Reliability concerns the extent to which a measurement scale used in a questionnaire provides consistent and stable results (Carmines & Zeller, 1979). A measurement scale is considered to have high reliability if every item of the same scale supports to measure the same construct (Huck, 2007; Aithal A., & Aithal S., 2020). Reliability is also associated with repeatability. As an example, a scale is said to be reliable if repeated measurements performed under constant conditions will give the same result (Moser & Kalton, 1989; Taherdoost, 2016). There are different statistical techniques used to test Reliability, but this study focuses on the assessment of Internal Consistency, which typically evaluates a construct through a range of items within the same questionnaire. The most commonly used measure for internal consistency is the Cronbach's Alpha coefficient. Cronbach's Alpha assumes that all items used for each construct are identically scored, such as in our case, through Likert scales (Straub et al., 2004). For a given questionnaire, its value usually ranges from 0 to 1 and may sometimes be negative if items are negatively correlated with each other (Aithal A., & Aithal S., 2020). If Cronbach's Alpha assumes the value 0, it indicates no internal consistency, while if it equals 1, it means that items are perfectly correlated (perfect internal consistency). For each dimension (construct), the value of Cronbach's Alpha is expected to be at least equal to 0.70 to assess an adequate level of reliability, although for an exploratory or pilot study, a value equal to or above 0.60 can also be accepted (Straub et al., 2004; Taherdoost, 2016). Lower values of Cronbach's Alpha represent indicators of poor internal consistency of constructs, hence, poor interrelation between the items (Aithal A., & Aithal S., 2020). The assessment of internal consistency for Competence and Goodwill Trust dimensions is discussed in the following section, after testing Convergent and Discriminant Validity of our survey constructs.

### 4.4 Results of Measurement Validation

As the SPSS output for descriptive statistics shows, all 198 cases are valid and all means are consistent, hence there are no missing values or outliers in the imported dataset. Before conducting Principal Component Analyses for the two Trustworthiness Expectations dimensions, we assessed

the factorability of our dataset by checking correlation coefficients, which could also help us to evaluate Convergent Validity of scales. The Correlation Matrix from SPSS shows that all correlations among items belonging to the same construct are significant and above 0.40. Although some intra-construct correlations are slightly higher than 0.75 (almost every item in the dataset is highly correlated with the others), the data seem to be suitable for factor analysis, since, in general, items loading on the same construct (e.g., CompetenceTrust1, CompetenceTrust2, CompetenceTrust3) show the highest correlation coefficients between each other. This means that items which conceptually belong to the same dimension are demonstrated to be technically correlated, thus, a first evidence of convergent validity is observable. KMO criterion shows a value of 0.909, which is notably higher than the threshold of 0.5, while Bartlett's Test for Sphericity, which statistically tests if the population correlation matrix equals an identity matrix, is shown to be significant at 1%. Hence, we were able to establish the factorability of our dataset. As first, an Exploratory Factor Analysis was conducted, without specifying the number of factors that we wanted to extract and basing on Eigenvalues criteria. For conducting EFA, we chose to use Principal Component Analysis (PCA) with an orthogonal rotation method (Varimax rotation), which keeps the factors uncorrelated between each other. As expected, two principal components were extracted, which respectively explained 65.4% and 11.26% of the total variance in our dataset before rotation, and 39.78% and 36.87% of the variance after rotation. After extraction, all communalities were higher than 0.5, meaning that over 50% of the variance in each item could be explained by the two extracted factors. Tables 3 and 4 show the component matrixes before and after Varimax rotation (source: SPSS). The tables do not show factor loadings lower than 0.4 in order to simplify the visualization of the two components. As we can see, the initial solution has improved after rotation and a clear pattern can be distinguished. Variables belonging to the Goodwill Trust dimension load high on the first factor, while variables measuring Competence Trust load higher on the second factor (Convergent Validity was confirmed). However, the rotated factor matrix shows three items cross-loading on both factors, which are GoodwillTrust1, GoodwillTrust2, and GoodwillTrust3, the first three items measuring Goodwill Trust. Hence, results of EFA suggested us to delete these items from the measurement model, since at this point we were not able to assess Discriminant Validity of our scales. Therefore, the three items were removed from the dataset before conducting the Confirmatory Factor Analysis.
#### TABLE 3: COMPONENT MATRIX (EFA)

	Component					
	(1)	(2)				
GoodwillTrust1	,859					
GoodwillTrust2	,849					
CompetenceTrust2	,832					
GoodwillTrust4	,829					
CompetenceTrust3	,825					
GoodwillTrust7	,805					
GoodwillTrust5	,805					
GoodwillTrust3	,802					
GoodwillTrust6	,741	,491				
CompetenceTrust1	,731	-,569				

# Extraction Method: Principal Component Analysis. 2 components extracted.

TABLE 4: ROTATED COMPONENT MATRIX (EFA)

	Component					
	(1)	(2)				
GoodwillTrust6	,875					
GoodwillTrust7	,810					
GoodwillTrust5	,804					
GoodwillTrust4	,789					
GoodwillTrust2	,609	,591				
GoodwillTrust3	,605	,528				
CompetenceTrust1		,916				
CompetenceTrust3		,854				
CompetenceTrust2		,799				
GoodwillTrust1	,521	,699				

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 3 iterations.

To conduct CFA, we implied a PCA using an oblique rotation method (Promax rotation), which allows the factors to be correlated and thus can simplify the interpretation of the factor (pattern) matrix. As it can easily be seen in Table 5, our solution has clearly improved, since now there are no cross-loading items between the two distinct factors, and each variable loads high on its posited construct, meaning that removing the items GoodwillTrust1, GoodwillTrust2, and GoodwillTrust3 was the right choice to obtain our intended results (source: SPSS). The structure matrix also confirms that the correlations between factors and variables are significantly higher for the items within the same dimension. Moreover, the factor correlation matrix indicates us that the Promax solution is more efficient than the one obtained by using Varimax rotation, since we can observe reasonably large correlation between the two components. This means that an oblique rotation method was the most appropriate to use for conducting our PCA (Rennie, 1997). Hence, results of our CFA enabled us to assess Discriminant Validity of our measures, demonstrating that the three items intended to reflect the Competence Trust dimension significantly differ from those that reflect the Goodwill Trust construct. To determine model fit, we decided to examine the differences between the observed correlations (as given in the input correlation matrix) and the reproduced correlations. As the output shows, those differences are relatively low (with the exception of few residuals with absolute values slightly greater than 0.05 and only two values which are close to 0.10), meaning that our model fits well to the collected data.

	Com	ponent
	(1)	(2)
GoodwillTrust6	,987	
GoodwillTrust7	,853	
GoodwillTrust5	,845	
GoodwillTrust4	,794	
CompetenceTrust1		1,028
CompetenceTrust3		,884
CompetenceTrust2		,806

#### TABLE 5: PATTERN MATRIX (CFA)

Extraction Method: Principal Component Analysis. Rotation Method: Promax with Kaiser Normalization. Rotation converged in 3 iterations.

After having assessed Convergent and Discriminant Validity of our scales, we performed a reliability test by estimating Cronbach's Alpha coefficients for each extracted factor measuring Requesters' Trust. Regarding the Competence Trust dimension, including 3 items, Cronbach's Alpha assumes the value 0.917, which is index of nearly perfect internal consistency. Even for the Goodwill Trust dimension, which now comprises only 4 items after variable deletion, the value of Cronbach's Alpha is notably high (0.904), indicating a very elevated level of reliability. However, an excessively high value of Cronbach's Alpha denotes that some items belonging to the same construct might be redundant, namely, some questions in the survey are repeated and should be modified (Aithal A., & Aithal S., 2020). Moreover, values around 0.95 or above may indicate that respondents did not answer naturally to every survey question, since they were subject to very similar or identical items measuring the same construct, thus capable of recalling previous answers (Straub et al., 2004). To overcome to this bias, the order of items should be randomized or distributed in a way that prevents respondents to identify underlying patterns or dimensions (Cook & Campbell, 1979). Nevertheless, it has been found that the value of Cronbach's Alpha is a function of the number of items measuring a certain construct (Aithal A., & Aithal S., 2020), meaning that the high level of internal consistency may be also caused by an excessive number of items for the two dimensions.

To sum up what discussed about our measurement validation process, the assessment of Construct Validity and Internal Consistency of questionnaires gave us useful and important insights regarding the adequacy of our measurement scales, providing, in general, positive and reliable results. We were able to assess Convergent Validity of our Competence and Goodwill Trust factors, but we found less initial evidence of Discriminant Validity, since we had to remove 3 items from the model to proceed with the analysis. Although items showed a very high correlation within and between constructs, also confirmed by the high value of Cronbach's Alpha, our Confirmatory Factor Analysis suggested that a 2-factor model of Competence and Goodwill Trust is adequate and that the scales that were used in the survey are technically valid for our measurement purpose. Therefore, the measurement validation of our questionnaires enabled us to effectively operationalize our three final constructs measuring Requesters' Trust, namely, *Willingness to Pay, Competence Trust,* and *Goodwill Trust*, which have been used to conduct our data analysis and to show potential patterns related to our four previously mentioned hypotheses.

## 5. Analysis and Results

#### 5.1 Regression Analysis

To perform our analysis, we employed a multiple regression model with an OLS estimation, which consists in minimizing the sum of squared errors for the regression model (Rousseeuw, 1984), using clustered standard errors (Abadie, Athey, Imbens, & Wooldridge, 2017). The reason why robust standard errors cannot be used is that our model violates the assumption of the independence of observations, since each respondent was presented to three vignettes (Dunning, 2012; Schafheitle et al., 2020). Besides Willingness to Pay, we used mean scores for the two factors of Competence and Goodwill Trust, which have been computed in SPSS, as dependent variables. Hence, in order to test our four hypotheses, we run three different regressions on SPSS, respectively estimating the influence of the four independent variables on Willingness to Pay, Competence Trust, and Goodwill *Trust*, as three distinct measures for Requesters' Trust. After performing the three main regression analyses, we decided to run two additional regressions, in order to test the potential influence of *Competence* and *Goodwill Trust* on *Willingness to Pay*. The reason is that the two Trust dimensions based on different trustworthiness expectations can represent two important antecedents to the Trust-related intention to pay a surplus to the platform, and thus can have different degrees of influence on this behaviour. Table 6 shows descriptive statistics and correlation coefficients for all variables, including independent variables, controls, and the three constructs which measure the dependent variable. Results of regression analyses are summarized in *Table 7* and discussed in the following section (see Appendix [4] for complete regression results).

#### 5.2 Results and Hypotheses Testing

Before conducting multiple regression analyses, we checked if our dataset was adequate for this model through several prior tests. First, a preliminary regression model was employed, including all our independent variables and controls to ensure that potential irrelevant variables would not cause biases in the OLS estimates and in the interpretation. It was found that *Requester Status* had no significant relationship with any of the dependent variables, since its p-value was larger than 0.10 for each regression output, and that the inclusion of this control was causing a considerable increase in standard errors for each variable and a slight reduction in the R-squared. This could depend on the sample size, since we were not able to collect sufficient data from restaurant owners, which represented less than 7% of our population. Hence, we decided to remove the control variable *Requester Status* from the model since it could affect the accuracy of our estimates in a negative way. The next step regarded the test of the assumptions for our multiple regression model, starting

from the assessment of Linearity, Homoscedasticity and Normality of error term. As Appendix [4] shows, the P-P plots and the Scatterplots of residuals for each regression can ensure that our independent and dependent variables follow a linear relationship, since the standardized residuals follow the normality line and the variance of error terms does not increase or decrease as predicted values increase. Hence, the first three assumptions could be confirmed. To assess the presence of multicollinearity, we looked at the VIF (Variance Inflation Factors), which should assume a value that is lower than 10 or, in the best case, lower than 5. In our case, all VIF values are lower than 5 and close to 1, which means that there are no independent variables or controls which are expressed as a linear combination of other variables. This assumption could also be confirmed by the low correlations among variables in the correlation matrix (*see Table 6*), and by the fact that, after removing *Requester Status*, there are no more variables with insignificant coefficients or unexpected signs in all three regression models. Therefore, our model meets all the necessary assumptions to run the analysis and to correctly interpret our results.

As reported in Table 7, results of the first three regression models mostly show positive and significant coefficients for all our four independent variables, while lower and less significant coefficients for our controls. The F-test is shown to be significant at 1% for all regressions, meaning that variations in the dependent variables can be explained by at least one independent variable. The first regression model shows an R-squared of 0.56, and an adjusted R-squared of 0.54, which indicates a satisfying goodness of fit. The second model shows a slightly higher value of R-squared (0.59) and Adjusted R-squared (0.58), while the third one displays lower values of determination coefficients with respect to the other two models (R-squared = 0.50, Adjusted R-squared = 0.48). In general, it can be said that the three regression models fit well with our data, and that our second regression, which tests effects on *Competence Trust* as dependent variable, shows the highest level of model fit. Regarding the assessment of our hypotheses, we found that Workers' Voice has a positive and significant relationship with Willingness to Pay ( $\beta = 0.18$ ; p<0.01), Competence Trust  $(\beta = 0.10; p < 0.05)$ , and *Goodwill Trust* ( $\beta = 0.31; p < 0.01$ ), having the highest magnitude of effect on Goodwill Trust. This means that our first hypothesis (H1) can be confirmed, namely, an increase in Gig workers' voice in the decision-making processes of an online labour platform leads to an increase in Requesters' Trust towards that platform. Moreover, the relationship is stronger and more significant for Goodwill Trust dimension. Training shows instead a larger positive connection with Willingness to Pay ( $\beta = 0.49$ ) and Competence Trust ( $\beta = 0.56$ ), and a lower positive relationship with *Goodwill Trust* ( $\beta = 0.17$ ). All effects are significant at 1% (p<0.01). Thus, also our second hypothesis (H2) can be confirmed, since an increase in the level of training provided by the organization towards its workers is associated with an increase in *Requesters' Trust* in the platform.

The highest magnitude of effect is exerted on *Competence Trust*, meaning that the positive relationship with *Training* is stronger for that dimension with respect to the others. Furthermore, we found that also *Job Security* is highly and significantly related with *Willingness to Pay* ( $\beta = 0.40$ ; p<0.01), *Competence Trust* ( $\beta = 0.35$ ; p<0.01), and *Goodwill Trust* ( $\beta = 0.41$ ; p<0.01), hence confirming our third hypothesis (H3) as well. In this case, the effect is larger for *Goodwill Trust*. Lastly, regression results show that *Algorithmic Transparency* is positively related to all three Trust constructs ( $\beta = 0.23$ ;  $\beta = 0.28$ ;  $\beta = 0.36$ ) with a significance at 1% (p<0.01), and that the largest effect is exerted once again on *Goodwill Trust*, confirming also our fourth hypothesis (H4). Among the four independent variables, Training has the strongest relationship with both *Willingness to Pay* and *Competence Trust* dimensions, while *Job Security* shows the strongest link with *Goodwill Trust*.

Regarding control variables, *Gender* (1 = female) displays a positive and significant relationship with *Willingness to Pay* ( $\beta = 0.15$ ; p<0.01), meaning that female requesters are more prone to pay a surplus for the services offered by an online food-delivery platform with respect to male requesters. Moreover, the link between *Gender* and *Goodwill Trust* is also demonstrated to be positive and significant at 10% ( $\beta = 0.09$ ; p<0.10), while the relationship with *Competence Trust* turns out to be weaker and not significant ( $\beta = 0.08$ ; p>0.10). *Age* shows instead a slightly positive but not significant connection with *Willingness to Pay* ( $\beta = 0.06$ ; p>0.10), but negative and significant links with *Competence* ( $\beta = -0.10$ ; p<0.05) and *Goodwill Trust* ( $\beta = -0.20$ ; p<0.01). This means that the older requesters are, the less they are willing to Trust an online platform, and this negative effect is shown to be larger for *Goodwill Trust*. The last control variable included in the model is *Trust Propensity*, which surprisingly presents a very weak and non-significant relationship with *Willingness to Pay* ( $\beta = 0.05$ ; p>0.10), yet positive and significant links with *Competence Trust* ( $\beta =$ 0.10; p<0.05) and *Goodwill Trust* ( $\beta = 0.14$ ; p<0.05).

Finally, we are able to assess results of our post-hoc analyses, which assume *Competence* and *Goodwill Trust* as independent variables and *Willingness to Pay* as the dependent variable. Besides the two constructs, Model 4 includes only control variables, while Model 5 includes also our previous four independent variables (see *Table 7*). In both models, we can notice a substantial increase in the R-squared (0.67; 0.71) and Adjusted R-squared (0.66; 0.70) values, meaning that these models show a higher goodness of fit with respect to the previous three. The most important finding is that both *Competence Trust* ( $\beta = 0.52$ ;  $\beta = 0.31$ ) and *Goodwill Trust* ( $\beta = 0.31$ ;  $\beta = 0.37$ ) show a positive and significant (p<0.01) relationship with *Willingness to Pay* in both Model 4 and 5, confirming the assumption that the more requesters perceive Competence and Goodwill from a

platform, the more they are willing to pay a surplus for its services. The effect of *Age* on *Willingness to Pay* is now positive ( $\beta = 0.19$ ;  $\beta = 0.17$ ) and significant (p<0.01) in both models, less strong ( $\beta = 0.10$ ;  $\beta = 0.09$ ) and significant (p<0.05) for *Gender*, while the impact of *Trust Propensity* ( $\beta = -0.50$ ;  $\beta = -0.03$ ) in both models is not significant anymore (p>0.10). What is interesting is that by including previous independent variables in Model 5, the effects of *Workers' Voice* ( $\beta = 0.03$ ) and *Algorithmic Transparency* ( $\beta = 0.01$ ) are much weaker and not significant (p>0.10), while the effect of *Training* ( $\beta = 0.25$ ) and *Job Security* ( $\beta = 0.14$ ) are still strong and significant at 1% (p<0.01). Moreover, by excluding the previous four independent variables from the model (Model 4), the relationship between *Competence Trust* and *Willingness to Pay* is notably stronger than their relationship in Model 5, in which previous independent variables are included, with respect to Model 4.

After assessing regression results, we can hence affirm that, considering the main analysis, all our four hypotheses are confirmed and results in general are consistent with our expectations. Interpretation and implications of our findings are discussed in the following section.

#### TABLE 6: DESCRIPTIVE STATISTICS AND CORRELATIONS

	п	Min	Max	Mean	StD	1	2	3	4	1	5	6	7	8	9	10	11
Willingness To Pay	198	1	7	4.22	1.68	1											
Competence Trust	198	1	7	4.57	1.51	.74	1										
Goodwill Trust	198	1	7	4.41	1.40	.66	.62	1									
Workers' Voice	198	0	1	0.49	0.50	.18	.09	.29	1								
Training	198	0	1	0.53	0.50	.51	.58	.18	04	1							
Job Security	198	0	1	0.49	0.50	.43	.38	.42	.00	.03	1						
Algorithmic Transparency	198	0	1	0.53	0.50	.21	.28	.37	.00	01	01	1					
Req. Status (1=Rest.Owner)	198	0	1	0.06	0.24	.09	.04	.12	.09	05	.21	.03	1				
Gender (1=female)	198	0	1	0.36	0.48	.26	.15	.12	.10	.09	.09	08	.07	1			
Age (classes)	198	1	6	2.08	1.43	.13	05	12	.11	01	.05	04	01	.25	1		
Trust Propensity	198	1	7	4.08	1.38	.21	.23	.24	.03	.09	.10	.14	.03	.21	.14	1	

#### TABLE 7: RESULTS OF REGRESSION ANALYSES

	(1) Willingness To Pay	(2) Competence Trust	(3) Goodwill Trust	(4) Willingness To Pay	(5) Willingness To Pay
	101 uy	11451	11031	101 uy	101 dy
Competence Trust				0 52***	0 31***
competence Trust				(0.06)	(0.07)
Goodwill Trust				0.36***	0.37***
				(0.06)	(0.07)
Workers' Voice	0.18***	0.10**	0.31***	(0.00)	0.03
	(0.16)	(0.14)	(0.14)		(0.14)
Training	0.49***	0.56***	0.17***		0.25***
C	(0.16)	(0.14)	(0.14)		(0.18)
Job Security	0.40***	0.35***	0.41***		0.14***
5	(0.16)	(0.14)	(0.14)		(0.16)
Algorithmic	0.23***	0.28***	0.36***		0.01
Transparency	(0.16)	(0.14)	(0.15)		(0.15)
Gender (1=female)	0.15***	0.08	0.09*	0.10**	0.09**
	(0.18)	(0.15)	(0.16)	(0.15)	(0.15)
Age	0.06	-0.10**	-0.20***	0.19***	0.17***
C	(0.06)	(0.05)	(0.05)	(0.05)	(0.05)
Trust Propensity	0.05	0.10**	0.14**	-0.50	-0.03
	(0.06)	(0.05)	(0.05)	(0.05)	(0.05)
Constant	1.41***	2.20***	2.40***	-0.70**	-0.42
	(0.29)	(0.25)	(0.26)	(0.31)	(0.30)
F-stat	34.45***	39.61***	26.82***	78.16***	51.74***
R-squared	0.56	0.59	0.50	0.67	0.71
Adjusted R-squared	0.54	0.58	0.48	0.66	0.70

(Standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.10)

## 6. Discussion

This research aimed at validating a factorial survey (vignette study) to subsequently test the influence of four specific design principles of Platform Cooperatives on *Requesters' Trust*. The validation of our measurement model was performed through a cognitive pre-test and a technical test, which were conducted in accordance with the "six-step" validation method developed by Collingridge & Gantt (2008). The cognitive pre-test consisted in conducting three cognitive interviews to three experts of platform designing, which were able to give us fundamental insights

and suggestions to revise our vignettes and increase their understandability, their accuracy in measuring our variables and the feasibility of a hypothetical decision-making situation for our respondents. The verbal representation of Workers' Voice, Training, Job Security, and Algorithmic Transparency was modified in general by simplifying and summarizing concepts, removing superfluous information which could bias response quality, and adding practical examples of managerial actions aimed at improving the ethical treatment of gig workers, in order to increase trustworthiness expectations of requesters. Our cognitive pre-test for validation enabled us to collect consistent and unbiased responses through the presented questions, whose validity and reliability in achieving our measurement purpose were assessed through the measurement validation phase. First, the assessment of Construct Validity was useful to test whether items ideally belonging to the same construct were actually correlated (Convergent Validity), and if items belonging to different theoretical dimensions did not have any factual relationship (Divergent Validity) (Taherdoost, 2016; Aithal A., & Aithal S., 2020). In general, we found that all items in the questionnaire were highly correlated between and within each other (as shown by the correlation matrix and by the high internal consistency), hence indicating that respondents gave very similar answers for both posited constructs, Competence and Goodwill Trust. However, this did not seem to represent a problem, since there were no correlations between different dimensions which were above 0.75 and very few intra-construct correlations that exceeded this threshold, yet still significantly higher than interconstruct correlations. Our EFA, conducted through the use of PCA with Varimax rotation, demonstrated that items which were supposed to be correlated had in fact a technical relationship. Hence, we were able to assess Convergent Validity of our measures, but the rotated component matrix highlighted the presence of three items cross-loading on both Competence and Goodwill Trust factors. These items were in particular "I think that this platform cares about my welfare and my satisfaction." (GoodwillTrust1), "My needs and desires are very important for this platform." (GoodwillTrust2), and "I think that this platform will go out of its way to help its requesters." (GoodwillTrust3), the first three items posited to belong to the Goodwill Trust dimension. By removing these items from the analysis, we were able to assess Discriminant Validity of our scales, as confirmed by our CFA (PCA with Promax rotation). This finding suggests us that, when presented to those three items, respondents expressed their perceptions of Ability as well as Benevolence and Integrity towards the platform. This means that the items were not adequate to measure only Goodwill Trust, thus they could be misinterpreted since they referred to the willingness of a platform to satisfy their requesters, which relates also to the Competence of a platform. The main reason is clear. The original scale used by Searle et al. (2011) was intended to measure Trust from employees themselves, rather than from requesters. Therefore, our readaptation

of this scale, in particular of those three items, from the point of view of requesters was not effective to define an evident distinction between organizational actions depending on Competence and behaviours depending on Goodwill. Future research could take this issue into consideration when designing items measuring trustworthiness expectations from the point of view of requesters, and not from workers' perspective. Moreover, the high value of Cronbach's Alpha for each factor alerts us that respondents provided strictly similar answers when presented to the hypothetical decision-making scenario, hence they could have been subject to repetitive or redundant questions, as well as they could have been influenced by previous answers while filling the survey (Straub et al., 2004). Thus, a possible solution for future questionnaires could be to slightly differentiate the verbalization of those items in order to highlight the distinction between similar measures within and between constructs. Another way to ensure a higher variance in survey responses regards the revision of the order of items, which should be randomized to prevent the identification of dimensions by respondents (Cook & Campbell, 1979). Lastly, the number of items measuring the same factor could be reduced to avoid repetitions and response biases which can cause reliability issues (Aithal A., & Aithal S., 2020). In summary, it can be said that our validation process was successful to highlight strengths and weaknesses of our measurement model. The cognitive pre-test enabled us to effectively revise vignettes in a way that could lead respondents to fully understand the purpose of the survey, hence providing us with consistent and very useful results. These results were accurately assessed in the measurement validation phase, which allowed us to identify and potentially overcome measurement and response errors determined by the formulation, the number, the order, and the readaptation of items measuring different dimensions of Requesters' Trust. We found that our CFA, conducted through a PCA with Promax rotation, was more efficient than our EFA to determine the presence of the two factors Competence Trust and Goodwill Trust, since the use of an oblique rotation is more useful when components show a high degree of correlation between each other, as in our case (Rennie, 1997). Therefore, our cognitive and technical validation enabled us to develop more effective measures for our independent variables, and to technically identify our Competence and Goodwill Trust dimensions which were subsequently used as measures for our dependent variable Requesters' Trust, together with the 1-item scale Willingness to Pay. These three constructs were used as three different dependent variables for our regression analyses, whose results are interpreted and discussed below.

To test the influence of our four cooperatives' design principles on Requesters' Trust, we first run a regression analysis for each dependent variable. All results were consistent with our hypotheses and showed positive and significant relationships between the four design principles and the three Trust factors, implying that the better gig workers are treated, the more Trust is shown by requesters

towards the platform, hence, the more they will be incentivized to pay an additional price for its services. This is coherent with the statement that the implementation of design principles related to the so-called "decent work" is also associated to a better economic performance of a platform, because of requesters' moral awareness and ethical consumption (Vitell, 2015; Healy et al., 2020; Smith et al., 2021; Giaconi et al., 2022). Hence, food-delivery platform cooperatives may invest on these four principles to increase their popularity in the market and lead requesters to pay a surplus as a consequence to their ethical behaviour towards worker-owners. However, in order to answer to our main research question, we should investigate which principles matter most to develop Requesters' Trust in an online platform, namely, which variables had the largest influence on each dimension of Trust. First, we found that Workers' Voice has a stronger relationship with Goodwill Trust with respect to its link with Willingness to Pay or Competence Trust, meaning that an increase in gig workers' participation and influence in the decision-making processes of a platform mainly leads to increased perceptions of Benevolence and Integrity from its requesters, rather than driving perceptions of Ability or a direct purchasing behaviour. This finding is consistent with McCall (2001)'s claims about the relationship between workers' voice and fundamental moral principles (normative integrity) which, as reiterated by Martin et al. (2017) or Kroeger (2017), can be significantly associated with users' engagement with the platform because of value congruence. Second, Training shows to have a stronger connection with Competence Trust with respect to Willingness to Pay and Goodwill Trust, meaning that if a food-delivery platform demonstrates to invest in learning and training activities to develop gig workers' skills, requesters will increase their perceptions regarding the Ability of the platform in performing its tasks and meeting its responsibilities (Gillespie & Dietz, 2009; Searle et al., 2011). This confirms the claim that the implementation of training and other high-performance work practices may lead to a better organizational performance and a higher quality of services offered by the platform (He et al., 2020; Kuhn et al., 2021; Räisänen et al., 2021). Third, Job Security is found to have a stronger relationship with Goodwill Trust rather than with Competence Trust and Willingness to Pay, confirming the finding that offering benefits such as health insurance and employment guarantees to gig workers, as a form of "decent work" (Scholz, 2017; Berg et al., 2018; Giaconi et al., 2022), represents a strong signal of moral integrity and benevolence towards a platform's stakeholders, thus increasing goodwill-based trust from requesters (Searle et al., 2011; Smith et al., 2021). Fourth, we found that also Algorithmic Transparency is more strongly related to Goodwill Trust with respect to the other two constructs, since the provision of more clear and transparent algorithmic management systems symbolizes that the platform cares about workers' well-being, hence reflecting requesters' perceptions of Benevolence and Integrity as well (Searle et al., 2011; Scholz,

2016; Gal et al., 2020). In general, *Training* and *Job Security* show the strongest relationships with Requesters' Trust, since their coefficients are in average higher with respect to the coefficients of Workers' Voice and Algorithmic Transparency. Beyond showing the strongest connections with Competence and Goodwill Trust respectively, Training and Job Security also exert the highest individual influences on Willingness to Pay, meaning that they could potentially represent the most important factor that leads requesters to increase their purchase intentions toward online fooddelivery platforms. A possible implication of this finding is that, if they want to increase Requesters' Trust and subsequently demand towards them, Platform Cooperatives should be aware that besides offering gig workers a democratic say in the platform and performing transparent management actions, their main focus should be put on developing online training/learning programmes and providing benefits, safety, and employment guarantees. Our findings demonstrate that requesters care much more about the quality of their services and the employment condition of gig workers with respect to principles like democracy and transparency, since the first factors can potentially have a larger impact on perceived risks for them. Thus, although platform cooperatives are already found to provide more training opportunities and job security to their worker-members (Majee & Hoyt, 2011; Conte & Jones, 2015; Scholz, 2016; Schneider, 2018), they need to specifically improve these two factors and make sure that requesters become aware of their better conduct towards gig workers through several advertising or referral programs. The awareness of requesters is crucial to increase perceptions of trustworthiness and thus the willingness to be vulnerable to the actions performed by the platform.

The individual importance of *Training* and *Job Security* for the development of *Requesters' Trust* is also highlighted by the results of our additional post-hoc analyses. Results of the last two regressions suggest us that both *Competence Trust* and *Goodwill Trust* can represent important antecedents for requesters' willingness to pay a surplus to the platform, and this is perfectly consistent with our assumptions since trustworthiness expectations were found to be paramount for the explanation of trust-related behaviours, including purchase and transaction intentions (Gefen, 2002; Hawlitschek et al., 2016; Schafheitle et al., 2020). Considering the influences of the sole two constructs, without including previous independent variables in the model, *Competence Trust* seems to have the strongest relationship with *Willingness to Pay*. This is justified by the assumption that perceptions of a platform's Ability in performing their tasks and offering their services is negatively related to the perceived risk of unsuccessful transactions for requesters (Mayer et al., 1995; Hawlitschek et al., 2016). The relationship between Ability and perceived transactional risks can hence be stronger and more direct than the link between perceived as more trustworthy from

its requesters with respect to a benevolent yet incompetent organization while performing an online transaction. Therefore, it can be said that requesters will be more incentivized to pay a surplus to a platform when the platform demonstrates to be competent and qualified in performing its job, rather than appearing generous and morally just towards stakeholders. However, if we take into consideration the former four independent variables, the results of the analysis may change significantly, as shown by the outputs of our last regression model. In Model 5 we found that Workers' Voice and Algorithmic Transparency do not exert a direct effect on Willingness to Pay without the influence of the two Trust dimensions, while Training and Job Security still show direct, positive, and significant relationships because they still affect Willingness to Pay on their own. An implication of this finding is that a higher gig workers' participation in decision-making and a higher level of algorithmic transparency can influence the surplus paid by requesters only because they increase perceptions of Benevolence and Integrity, but requesters are not willing to pay more just because of their mere presence. On the contrary, higher levels of Training and Job Security will not only increase the surplus paid by requesters through their influence on competence and goodwill perceptions, but also directly affecting their behavioural intentions to pay. This confirms our previous findings and enables us to answer to our main research question, demonstrating that the most salient design principles of platform cooperatives which can lead to the development of Requesters' Trust, and hence demand, are Training and Job Security. By affecting perceptions of Ability, Benevolence, and Integrity, and directly influencing requesters' purchase intentions, an increase in Training and Employment Security offered to gig workers can thus drive a platform's performance and success, since requesters will expect more trustworthy behaviours and hence lower perceived transactional risks when using that platform's services (e.g., ordering and receiving food). Although the indirect effect of Workers' Voice and Algorithmic Transparency on Willingness to Pay is still important to be considered, we can affirm that improving their Training and Job Security provision could represent the best solution for platform cooperatives to increase their popularity in the market and successfully compete with the most known capitalist online labour platforms.

A last important point to be discussed concerns the relationship between our control variables and Requesters' Trust. Regarding the first three regressions, female requesters showed to be more prone to express trust basing on perceptions on goodwill with respect to perceptions of competence, and their propensity to pay a surplus to a platform is demonstrated to be slightly higher than the one showed by male respondents. These findings are also confirmed by the results of our last two regression models. Regarding the effects of requesters' age, we obtained controversial results between the first analysis, in which *Age* was negatively related to both *Competence* and *Goodwill* 

*Trust* constructs, and the post-hoc analysis, in which *Age* surprisingly showed a positive and significant relationship with *Willingness to Pay*. This implies that older requesters seem to exert less perceptions of competence and goodwill towards a platform with respect to younger requesters, but when considering the effect of the two constructs on purchase intentions, older respondents are more willing to pay a surplus with respect to younger ones. In other words, trustworthiness expectations decrease as age increases, but at the same time, when they arise, the willingness to pay a surplus to the platform is higher for older people. Lastly, we found that *Trust Propensity* is positively and significantly related to both *Competence* and *Goodwill Trust*, but not to the willingness of requesters to pay a surplus to the platform, and this applies also for our additional analyses. A possible explanation is that the individual propensity of a requester to trust an online vendor is not a decisive driver for buying intentions, but can still represent an important factor affecting trustworthiness expectations because it reflects individual perceptions of a trustor towards trustees (Rotter, 1980; Searle et al., 2011).

## 7. Conclusions

This study provided an important contribution to the validation and the implementation of a vignette study (factorial survey) on Requesters' Trust in Platform Cooperatives. This was done by applying knowledge from various stream of literature and performing different pre-tests, in order to develop effective measures for the variables in question and test the relative hypotheses. To come up with our research question, we reviewed previous studies about Trust in Organizations, Trust in Online Platforms, and Platform Cooperatives, and then we framed a theoretical model hypothesizing four independent variables affecting the dependent variable *Requesters' Trust*. Accordingly, Trust was conceptualized as a willingness of requesters to be vulnerable to the actions of a food-delivery platform cooperative basing on positive expectations about the platform's trustworthiness, which concerns perceptions of organizational Ability, Benevolence, and Integrity (Mayer et al., 1995; Rousseau et al., 1998; Gillespie & Dietz, 2009; Pirson & Malhotra, 2011; Hawlitschek et al., 2016). Vignettes used for the survey were developed basing on concepts, descriptions and items used in earlier research, and they were presented to participants as hypothetical yet realistic decisionmaking situations. Respondents should evaluate three scenarios and make a reasoned choice to express the degree of Trust they would exert toward a particular online food-delivery platform, basing on different combinations of design principles. Results of our cognitive pre-test enabled us to identify potential measurement errors to avoid response biases, and our measurement validation

(conducted through the assessment of Construct Validity and Internal Consistency) generally confirmed our assumptions on the posited dimensions underlying our survey questions.

Subsequently, the model was used to test our hypotheses regarding the influence of *Workers' Voice*, Training, Job Security, and Algorithmic Transparency, four of the most important design principles of Platform Cooperatives, on the level of Trust exerted from requesters (i.e., Food consumers and Restaurant owners). The final theoretical aim of the study was to demonstrate that the implementation or the improvement of these four gig worker-friendly design principles could also lead to an increase in the popularity of food-delivery platform cooperatives in today's capitalist market, ensuring both better working conditions and profitability. Requesters' Trust was measured through the use of three constructs, *Willingness to Pay* (a surplus to the platform), *Competence* Trust (reflecting perceptions of Ability), and Goodwill Trust (reflecting expectations of Benevolence and Integrity). Our findings showed that *Training* and *Job Security* are the most salient design principles related to Requesters' Trust. Although all independent variables showed positive and significant effects, Training had the strongest influence on Competence Trust, Job Security on Goodwill Trust, and both had the largest effect on Willingness to Pay. Thus, we were able to confirm our four hypotheses and to potentially identify the most important principles which platform cooperatives should focus on to increase their popularity and success in the market. Furthermore, our post-hoc analysis highlighted that the relationship of Workers' Voice and Algorithmic Transparency with Willingness to Pay was weaker and not significant anymore with the inclusion of the other two constructs in the model, while *Training* and *Job Security* still had a direct and significant relationship with the dependent variable. These results enabled us to develop several insights and considerations regarding the need of Platform Cooperatives to invest on specific "worker-friendly" design principles to increase the degree of trust that requesters can exert towards them. The main implication of our findings is that the historical trade-off between "being good" and "being profitable" in the gig economy can finally find an equilibrium, which is represented by the role of trust in driving demand and purchase intentions. In other words, if platforms show to perform a better ethical conduct towards gig workers, providing them with "decent" working and living conditions, they can not only ensure their adherence to morally acceptable principles, but at the same time increase their performance, competitiveness, and profitability. Hence, by promoting the diffusion of these "morally adequate" models of governance in the field of online labour platforms, a wide range of benefits could emerge, not only for gig workers, but also for requesters, other stakeholders, and society in general.

To conclude, it can be said that this study gave useful and interesting contributions from both the technical side and the theoretical side. Our validation of the vignette study could help future researchers to develop more effective and unbiased questionnaires to measure the aforementioned constructs or other similar variables related to Requesters' Trust, Online Food-delivery Platforms, or Cooperatives' Design Principles. Moreover, results of our regression analyses potentially provided an aid for the development of a series of future studies about Trust in the context of the gig economy. Hopefully, future research will extend our considerations in order to increase the popularity and success of Platform Cooperatives as a better alternative to today's capitalist organizations, both under an ethical and an economic perspective.

## 8. Theoretical and Practical Implications

Theoretical Implications Our results and discussion provided us with several important theoretical considerations. First, the individual importance of Training and Job Security as fundamental design principles related to Trust needs to be explained more in depth. Findings show that the influence of these principles on the willingness of requesters to pay a surplus to the platform remains strong and direct even without the influence of trustworthiness expectations. This implies that requesters' perceptions of Ability, Benevolence, and Integrity are not necessary elements to explain Trustrelated behaviours towards an organization, since their role can also be irrelevant when requesters already feel confident to perform a transaction through a platform. In other words, requesters tend to directly reduce their perceptions of transactional risks when presented to situations of increased Training or Job Security, being willing to pay a surplus without dwelling on the "behavioural consequences" of a platform's actions (effects on trustworthiness expectations and perceptions). This can depend, for example, on the fact that the implications of an increase in Training and Job Security for gig workers are already well-known among requesters, since they continuously represent objects of discussion among unions and other stakeholders regarding gig workers' NSE condition (Eum, 2019; Bunders et al., 2022). Hence, greater information spread among requesters about workers' needs of training and employment security (with respect to the needs of democracy or transparency) causes a better and quicker understanding of the related outcomes for both workers and consumers, omitting the role of trustworthiness expectations in explaining buying intentions towards a platform. On the contrary, the need for platforms to increase workers' voice in decisionmaking and algorithmic transparency is still not so popular among stakeholders, meaning that requesters need to reflect more on their perceptions based on these principles before expressing their choice about paying a surplus to the platform. This suggests a need to increase awareness

among society not only about the lack of training or the insecure working conditions of gig workers, but also about their low participation in the decision-making processes of companies and the lack of clear and transparent management processes. In this way, requesters can be more informed about gig workers' conditions and needs, giving also more importance to the role of Voice and Transparency when deciding to pay or not to pay a surplus to a platform, and consequently promoting the spread of cooperativism. Therefore, an important theoretical implication of our findings is that, although Training and Job Security are showed to be paramount to explain requesters' Willingness to Pay a surplus, their direct influence on purchase intentions can also depend on the low amount of information owned by stakeholders about other deficiencies of today's online labour platforms. Increasing general awareness about the needs of voice and transparency for gig workers can thus lead to an increase in their importance in explaining trust-related behaviours, such as Willingness to Pay. Before expressing their judgements and intentions to transact through a platform, users should be fully informed about the implications of establishing certain design principles for many different stakeholders, being able to consciously and promptly evaluate the reasons and consequences of their choices.

Practical Implications Regarding practical implications of our findings, we first provided important suggestions for the improvement of our survey questions to measure trustworthiness expectations. Results of measurement validation (EFA and CFA) enabled us to identify potential biases in the items measuring Competence and Goodwill Trust, which were eliminated by deleting cross-loading items before conducting the analysis. The validation of our vignette study represented the most essential part of our research, since it provided us with several practical insights to develop useful recommendations for future surveys and studies related to Trust and Online labour platforms. These suggestions are presented in the last section of this paper. Secondly, we were able to define the most salient design principles of platform cooperatives to develop requesters' trust, which are Training and Job Security, but we did not mention how the implementation of these principles can concretely be achieved by online platforms under a managerial perspective. The study of Searle et al. (2011) illustrated some examples of "High-involvement" HR practices which can improve working conditions and enhance employee performance, commitment, and motivation, including, indeed, practices related to Training and Job Security. Those practices should be designed and combined in a way that fosters psychological links between the organization and workers' goals, for example, by improving communication flows and shaping internal behaviours in order to highlight the individual contribution of each worker on organizational processes and promoting synergistic effects (Nishii, Lepak, & Schneider, 2008). Resulting behaviours from gig workers can hence drive organizational involvement and performance, subsequently producing positive outcomes for many

categories of stakeholders, including requesters. By implementing the right combinations of welldesigned HR systems and practices, platform cooperatives can hence improve their "workerfriendly" design principles in order to increase trustworthiness expectations from their requesters and ensure their success in the market (Searle et al., 2011). A last practical implication of our findings is that current platform cooperatives should not only focus on the improvement of certain design principles (e.g., Job Security or Training) to foster Trust, but they should also worry about how to promote awareness of their ethical values among requesters. As mentioned before, besides investing in ethical practices for a better treatment of their workers, platform cooperatives need to make people informed about the reason why this is important and, particularly, that cooperatives can be more effective than capitalist platforms in providing those treatments. To achieve this purpose, cooperatives can make use of several advertising mechanisms, such as social networks, journal publications, or crowdfunding initiatives. However, social challenges faced by todays' platform cooperatives are numerous and include complexity of governance, lack of differentiation strategies, and lack of funding, which may represent sizable obstacles for the expansion of their popularity in a market dominated by other capitalist "giants" (Scholz, 2016; Philipp et al., 2021).

# 9. Limitations and Future Research

This study gave useful suggestions about the development of effective measurement scales for a vignette study in the field of Trust in Online Platforms, and contributed to the expansion of knowledge about the influence of platform cooperatives' design principles on Requesters' Trust, in order to promote their popularity and success in the market. However, there are several limitations and recommendations for future research which should be necessary mentioned as a very last point of this paper. First of all, when developing our items to measure the two Trust constructs, we readapted the scale of Searle et al. (2011) from the perspective of employees to the point of view of requesters, causing an excessively high correlation among items and biases in the responses. To provide a clearer distinction between Competence and Goodwill Trust, future researchers should revise the verbalization of the three items cross-loading on both factors and let respondents immediately understand which behaviours depend on one or another. Alternatively, as previously demonstrated, the deletion of these items from the questionnaire can be effective to distinguish the two dimensions based on different trustworthiness expectations. Moreover, in order to reduce the general level of correlation between variables, as well as the excessive internal consistency, randomizing the order of questions can represent a useful solution since it may prevent respondents to rely on previous answers when being subject to similar questions (Straub et al., 2004). Another

important limitation to be mentioned is that we are not able to fully trust our data analysis, since we drew on a very small sample and results of our validation, even if reliable and consistent with our assumptions, need to be assessed and applied to other studies before attesting our findings. Thus, results of our regression analyses should be "taken with a grain of salt", yet they might represent a relevant starting point for the development of further research on the topic, hopefully, with the use of revised surveys basing on our previous suggestions and a larger sample size for the analysis. A third relevant limitation is that the exact reason why platform cooperatives are not as popular as other capitalist platforms is still unclear, hence it is not given that an increase in Requesters' Trust will lead to an increase in their success. There are many other reasons which can explain the low popularity of platform cooperatives, such as the aforementioned lack of capital and complexity, as well as the absence of innovation, institutional support, or a profit-oriented strategy (Scholz, 2016; Schneider, 2018; Philipp et al., 2021; Bunders et al., 2022). Hence, an increase in requesters' trust and purchase intentions of requesters basing on trustworthiness expectations can be not enough to ensure cooperatives a competitive position in the market. Requesters may still prefer to use traditional platforms to order food because of lower costs or higher efficiency, even if at the expenses of gig workers. Future research may investigate on other ways to increase the popularity and competitivity of platform cooperatives to improve both gig workers' conditions and stakeholders' well-being. Lastly, as mentioned in the theory section, there are numerous other factors which can lead to the development of Requesters' Trust in online labour platforms and organizations in general. Therefore, a possible suggestion for future studies may be to test the influence of other fundamental design principles of platform cooperatives (such as Workers' Income or Environmental Sustainability) on the level of Trust shown by their requesters or other stakeholders as well (such as institutions, investors, or gig workers). Hopefully, this and other related studies will contribute to the growth of these new forms of governance in the platform economy to ensure the best solutions for both consumers, restaurant owners, gig workers, and the whole society. By assessing whether principles of platform cooperatives are also associated with a higher level of Trust exerted by their stakeholders, researchers can give a potential demonstration that, in the long run, a good ethical conduct can also drive organizational success. "To reach the land of profit, follow the road of purpose." (Alex Edmans, The social responsibility of business, TEDx Talks, 2015)<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> https://www.youtube.com/watch?v=Z5KZhm19EO0

# References

Abadie, A., Athey, S., Imbens, G. W., & Wooldridge, J. (2017). *When should you adjust standard errors for clustering?* (No. w24003). National Bureau of Economic Research.

Adler, P. S., & Borys, B. (1996). *Two types of bureaucracy: Enabling and coercive*. Administrative science quarterly, 61-89

Agarwal, V. (2013). *Investigating the convergent validity of organizational trust*. Journal of communication management, 17(1), 24-39.

Aguinis, H., & Bradley, K. J. (2014). Best practice recommendations for designing and implementing experimental vignette methodology studies. *Organizational research methods*, *17*(4), 351-371.

Aithal, A., & Aithal, P. S. (2020). Development and validation of survey questionnaire & experimental data–a systematical review-based statistical approach. *International Journal of Management, Technology, and Social Sciences* (IJMTS), 5(2), 233-251.

Akhmedova, A., Vila-Brunet, N., & Mas-Machuca, M. (2021). *Building trust in sharing economy platforms: trust antecedents and their configurations*. Internet Research.

Ba, S., & Pavlou, P. A. (2002). Evidence of the effect of trust building technology in electronic markets: Price premiums and buyer behavior. MIS Quarterly, 26(3), 243–268.

Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Prentice- Hall, Englewood Cliffs, NJ

Behera, B., & Gaur, M. (2022). Skill Training for the Success of the Gig Economy. *Journal of Pharmaceutical Negative Results*, 2835-2840.

Berg, J., Furrer, M., Harmon, E., Rani, U., & Silberman, M. S. (2018). *Digital labour platforms and the future of work. Towards Decent Work in the Online World*. Rapport de l'OIT. ILO, Geneva

Braithwaite, V., & Levi, M. (Eds.). (1998). Trust and governance. Russell Sage Foundation

Bunders, D. J. (2021). *Gigs of their own: reinventing worker cooperativism in the platform economy and its implications for collective action*. In Platform Economy Puzzles (pp. 188-208). Edward Elgar Publishing.

Bunders, D. J., Arets, M., Frenken, K., & De Moor, T. (2022). The feasibility of platform cooperatives in the gig economy. *Journal of Co-operative Organization and Management*, *10*(1), 100167.

Carmines E. G. & Zeller, R. A. (1979). Reliability and Validity Assessment, Newbury Park, CA, SAGE.

Chen, D., Lai, F., & Lin, Z. (2014). A trust model for online peer-to-peer lending: a lender's perspective. Information Technology and Management, 15(4), 239–254.

Chen, H. S., Liang, C. H., Liao, S. Y., & Kuo, H. Y. (2020). *Consumer attitudes and purchase intentions toward food delivery platform services*. Sustainability, 12(23), 10177.

Collingridge, D. S., & Gantt, E. E. (2008). The quality of qualitative research. American journal of medical quality, 23(5), 389-395.

Collins, D. (2003). Pretesting survey instruments: an overview of cognitive methods. *Quality of life research*, *12*, 229-238.

Conference (2022). "Owning the Future: Sustainably Scaling Platform Cooperatives with the Global South", November 4–6, 2022, Museum of Tomorrow, Rio de Janeiro-Brazil

Conte, M. A., & Jones, D. C. (2015). *On the entry of employee-owned firms: Theory and evidence from US manufacturing industries, 1870–1960.* In Advances in the Economic Analysis of Participatory & Labor-Managed Firms (Vol. 16, pp. 1-31). Emerald Group Publishing Limited

Cook, J., & Wall, T. (1980). "New Work Attitude Measures of Trust, Organizational Commitment and Personal Need Non-Fulfillment.," *Journal of Occupational Psychology*, 53, 39-52.

Cook, T. D., & Campbell, D. T. (1979). Quasi-experimentation: Design & analysis issues for field settings (Vol. 351). *Boston: Houghton Mifflin*.

Davis-Blake, A., & Broschak, J. P. (2009). Outsourcing and the changing nature of work. *Annual Review of Sociology*, 35, 321-340.

Dietz, G., & Den Hartog, D. N. (2006). Measuring trust inside organisations. *Personnel review*, 35(5), 557–88

Dohmen, T., Falk, A., Huffman, D., Sunde, U., Schupp, J., & Wagner, G. G. (2011). *Individual risk attitudes: Measurement, determinants, and behavioral consequences.* Journal of the european economic association, 9(3), 522-550.

Drennan, J. (2003). *Cognitive interviewing: verbal data in the design and pretesting of questionnaires*. Journal of advanced nursing, 42(1), 57-63.

Dunning, T. (2012). *Natural experiments in the social sciences: a design-based approach*. Cambridge University Press.

Ert, E., Fleischer, A., & Magen, N. (2016). *Trust and reputation in the sharing economy: The role of personal photos in Airbnb*. Tourism management, 55, 62-73

Eum, H. (2019). All for One: Response of Worker-owned Cooperatives to Non-standard Employment. Brussels: CECOP

Evans, S. C., Roberts, M. C., Keeley, J. W., Blossom, J. B., Amaro, C. M., Garcia, A. M., ... & Reed, G. M. (2015). *Vignette methodologies for studying clinicians' decision-making: Validity, utility, and application in ICD-11 field studies*. International journal of clinical and health psychology, 15(2), 160-170.

Falahat, M., Lee, Y-Y., Foo, Y-C., & Chia, C-E. (2019). A model for consumer trust in ecommerce. Asian Academy of Management Journal, 24(Supp. 2), 93–109.

Felzmann, H., Villaronga, E. F., Lutz, C., & Tamò-Larrieux, A. (2019). *Transparency you can trust: Transparency requirements for artificial intelligence between legal norms and contextual concerns*. Big Data & Society, 6(1)

Frenken, K., Vaskelainen, T., Fünfschilling, L., & Piscicelli, L. (2020). An institutional logics perspective on the gig economy. In Theorizing the sharing economy: Variety and trajectories of new forms of organizing. Emerald Publishing Limited.

Gal, U., Jensen, T. B., & Stein, M. K. (2020). *Breaking the vicious cycle of algorithmic management: A virtue ethics approach to people analytics*. Information and Organization, 30(2)

Gefen, D. (2002). *Customer loyalty in e-commerce*. Journal of the Association for Information Systems 3(1), 2.

Gerber, E. R., & Wellens, T. R. (1997). Perspectives on Pretesting:" Cognition" in the Cognitive Interview?. Bulletin of Sociological Methodology/Bulletin de Méthodologie Sociologique, 55(1), 18-39.

Giaconi, M., Giasanti, L., & Varva, S. (2022). *The Value of "Social" Reputation: The Protection of MNE Workers from the Consumer's Perspective.* Global Jurist, 22(1), 1-17.

Gillespie, N., & Dietz, G. (2009). *Trust repair after an organization-level failure*. Academy of management review, 34(1), 127-145.

Greenhalgh, L., & Rosenblatt, Z. (1984). *Job insecurity: Toward conceptual clarity*. Academy of Management review, 9(3), 438-448.

Grover, S. L., & Crooker, K. J. (1995). Who appreciates family-responsive human resource policies: The impact of family-friendly policies on the organizational attachment of parents and non-parents. Personnel psychology, 48(2), 271-288

Ha, S. H., & Liu, L. T. (2010). *Critical Success Factors of Open Markets on the Internet in Terms of Buyers*. In Conference on e-Business, e-Services and e-Society (pp. 282–291).

Hawlitschek, F., Teubner, T., Weinhardt, C. (2016). *Trust in the Sharing Economy*. Die Unternehmung – Swiss Journal of Business Research and Practice 70(1), pp. 26-44

Healy, J., Pekarek, A., & Vromen, A. (2020). Sceptics or supporters? Consumers' views of work in the gig economy. *New Technology, Work and Employment*, 35(1), 1-19.

Heiland, H. (2020). Workers' voice in platform labour. An Overview. Düsseldorf: Hans-Böckler-Stiftung.

Huck, S. W. (2007). Reading Statistics and Research, United States of America, Allyn & Bacon.

Huselid, M. A. (1995). *The impact of human resource management practices on turnover, productivity, and corporate financial performance.* Academy of management journal, 38(3), 635-672.

Jarrahi, M. H., & Sutherland, W. (2019). *Algorithmic management and algorithmic competencies: Understanding and appropriating algorithms in gig work*. In Information in Contemporary Society: 14th International Conference, iConference 2019, Washington, DC, USA, March 31–April 3, 2019, Proceedings 14 (pp. 578-589). Springer International Publishing.

Johnston, H., & Land-Kazlauskas, C. (2018). *Organizing on-demand: Representation, voice, and collective bargaining in the gig economy*. Conditions of Work and Employment Series No. 94. International Labour Office, Geneva.

Kamal, P., & Chen, J. (2016). *Trust in Sharing Economy*. In Pacific Asia Conference on Information Systems.

Kramer, R. & Tyler, T. R. (Eds.) (1996). *Trust in Organizations. Frontiers of Theory and Research*, Thousand Oaks, CA, Sage

Kroeger, F. (2017). *Facework: creating trust in systems, institutions and organisations*. Cambridge Journal of Economics, 41(2), 487-514.

Kuhn, K. M., Meijerink, J., & Keegan, A. (2021). Human resource management and the gig economy: Challenges and opportunities at the intersection between organizational HR decision-makers and digital labor platforms. *Research in personnel and human resources management*, *39*, 1-46.

Lamers, L., Meijerink, J., Jansen, G., & Boon, M. (2022). A Capability Approach to worker dignity under Algorithmic Management. *Ethics and information technology*, 24(1), 10.

Lane, C., & Bachmann, R. (Eds.). (1998). *Trust within and between organizations: Conceptual issues and empirical applications*. Oxford University Press.

Lee, M. K., & Turban, E. (2001). A trust model for consumer internet shopping. *International Journal of electronic commerce*, 6(1), 75-91.

Lewis, J. D., & Weigert, A. (1985). Trust as a social reality. Social Forces, 63(4), 967-985.

Liu, W., He, C., Jiang, Y., Ji, R., & Zhai, X. (2020). *Effect of gig workers' psychological contract fulfillment on their task performance in a sharing economy - A perspective from the mediation of organizational identification and the moderation of length of service*. International Journal of Environmental research and public health, 17(7), 2208.

Lu, Y., Zhao, L., & Wang, B. (2010). From virtual community members to C2C e-commerce buyers: Trust in virtual communities and its effect on consumers' purchase intention. Electronic Commerce Research and Applications, 9(4), 346–360

Majee, W., & Hoyt, A. (2011). Cooperatives and community development: A perspective on the use of cooperatives in development. Journal of community practice, 19(1), 48-61.

Martin, C. J., Upham, P., & Klapper, R. (2017). *Democratising platform governance in the sharing economy: An analytical framework and initial empirical insights*. Journal of Cleaner Production, 166(November), 1395–1406

Mayer, R. C., & Davis, J. H. (1999). "The Effect of the Performance Appraisal System on Trust for Management: A Field Quasi Experiment," *Journal of Applied Psychology*, 84, 123-136.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). *An integrative model of organizational trust*. Academy of management review, 20(3), 709-734.

McAllister, D. J. (1995). Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations. Academy of management journal, 38(1), 24-59

McCall, J. J. (2001). *Employee voice in corporate governance: A defense of strong participation rights*. Business Ethics Quarterly, 195-213

McKnight, D. H., & Chervany, N. L. (2001). What trust means in e-commerce customer relationships: An interdisciplinary conceptual typology. International journal of electronic commerce, 6(2), 35-59.

Meijerink, J., & Bondarouk, T. (2023). *The duality of algorithmic management: Toward a research agenda on HRM algorithms, autonomy and value creation*. Human resource management review, 33(1), 100876

Meijerink, J., & Keegan, A. (2019). *Conceptualizing human resource management in the gig economy: Toward a platform ecosystem perspective*. Journal of managerial psychology, 34(4), 214-232.

Meijerink, J., Keegan, A., & Bondarouk, T. (2021). *Having their cake and eating it too? Online labor platforms and human resource management as a case of institutional complexity*. The International Journal of Human Resource Management, 32(19), 4016-4052.

Mittendorf, C. (2016). What Trust means in the Sharing Economy: A provider perspective on Airbnb.com.

Morgan, R. M., & Hunt, S. D. (1994). *The commitment-trust theory of relationship marketing*. Journal of marketing, 58(3), 20-38.

Moser, C. A., & Kalton, G. (1989). Survey methods in social investigation, Aldershot, Gower.

Mühl, J. K. (2014). Organizational trust. Springer International Publishing Switzerland

Nishii, L. H., Lepak, D. P., & Schneider, B. (2008). Employee attributions of the "why" of HR practices: Their effects on employee attitudes and behaviors, and customer satisfaction. *Personnel psychology*, 61(3), 503-545.

Ole Borgen, S. (2001). *Identification as a trust-generating mechanism in cooperatives*. Annals of public and cooperative economics, 72(2), 209-228

Pasquale, F. (2015). *The black box society: The secret algorithms that control money and information*. Cambridge, MA: Harvard University Press.

Pavlou, P. A., & Gefen, D. (2004). Building effective online marketplaces with institution-based trust. Information systems research, 15(1), 37-59

Petrovic, O., Ksela, M., Fallenbock, M., Kittl, C., Urban, G.L., & Zobel, R. (2003). *Trust in the network economy*. Santa Clara, CA: Springer-Verlag.

Philipp, P., Hermes, S., Schreieck, M., & Böhm, M. (2021). *Challenges and Success potentials of Platform Cooperatives*: Insights from a Multiple Case Study. In ECIS

Pirson, M., & Malhotra, D. (2011). Foundations of organizational trust: What matters to different stakeholders?. Organization Science, 22(4), 1087-1104

Probst, T. M. (2003). Development and validation of the Job Security Index and the Job Security Satisfaction scale: A classical test theory and IRT approach. Journal of occupational and organizational psychology, 76(4), 451-467.

Räisänen, J., Ojala, A., & Tuovinen, T. (2021). Building trust in the sharing economy: Current approaches and future considerations. Journal of cleaner production, 279, 123724.

Rennie, K. M. (1997). Exploratory and confirmatory rotation strategies in exploratory factor analysis.

Robinson, S. L. (1996). *Trust and breach of the psychological contract*. Administrative science quarterly, 574-599.

Rotter, J. B. (1980), "Interpersonal Trust, Trustworthiness, and Gullibility," *American Psychologist*, 35, 1-7.

Rousseau, D.M., Sitkin, S.B., Burt, R.S. and Camerer, C.F. (1998). 'Introduction to Special Topic Forum: Not so Different after All: A Cross-discipline View of Trust'. Academy of Management Review, Vol. 23, No. 3, pp. 393–404.

Rousseeuw, P. J. (1984). *Least median of squares regression*. Journal of the American statistical association, 79(388), 871-880.

Schafheitle, S., Weibel, A., Meidert, N., & Leuffen, D. (2020). The road to trust. A vignette study on the determinants of citizens' trust in the European Commission. *JCMS: Journal of Common Market Studies*, 58(2), 256-275.

Schneider, N. (2018). An Internet of ownership: Democratic design for the online economy. The Sociological Review, 66(2), 320–340

Scholz, T. (2016). *Platform cooperativism. Challenging the corporate sharing economy.* New York, NY: Rosa Luxemburg Foundation

Scholz, T. (2017). *Uberworked and underpaid: How workers are disrupting the digital economy*. John Wiley & Sons.

Schoorman, F. D., Mayer, R. C., & Davis, J. H. (2007). An integrative model of organizational trust: Past, present, and future. Academy of Management review, 32(2), 344-354.

Schor, J. (2021). *After the gig: How the sharing economy got hijacked and how to win it back.* University of California Press.

Searle, R., Den Hartog, D. N., Weibel, A., Gillespie, N., Six, F., Hatzakis, T., & Skinner, D. (2011). *Trust in the employer: The role of high-involvement work practices and procedural justice in European organizations*. The International Journal of Human Resource Management, 22(5), 1069-1092.

Sha, W. (2009). *Types of structural assurance and their relationships with trusting intentions in business-to-consumer e-commerce*. Electronic Markets, 19(1), 43-54.

Sitkin, S. B., & Pablo, A. L. (1992). *Reconceptualizing the determinants of risk behavior*. Academy of management review, 17(1), 9-38

Smith, B., Goods, C., Barratt, T., & Veen, A. (2021). *Consumer 'app-etite' for workers' rights in the Australian 'gig'economy*. Journal of choice modelling, 38, 100254

Sriraman, A., Bragg, J., & Kulkarni, A. (2017). *Worker-owned cooperative models for training artificial intelligence*. In Companion of the 2017 ACM Conference on computer supported cooperative work and social computing (pp. 311-314)

Straub, D., Boudreau, M. C., & Gefen, D. (2004). *Validation guidelines for IS positivist research*. Communications of the Association for Information systems, 13(1), 24.

Sun, J., Sun, Z., Li, Y., & Zhao, S. (2012). A strategic model of trust management in web services. Physics Procedia, 24, 1560-1566.

Taherdoost, H. (2016). Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. *How to test the validation of a questionnaire/survey in a research (August 10, 2016).* 

Tannenbaum, R., & Davies, S. M. (1969), "Values, Man and Organization," *Industrial Management Review*, 10, 67-86.

Ter Huurne, M. (2019). A Leap into Faith: Determinants of Trust in the Sharing Economy. Doctoral dissertation, Universiteit Utrecht.

Thibaut, J., & Walker, L. (1975), Procedural Justice, Hillsdale, NJ: Erlbaum

Tourangeau, R. (1984). *Cognitive sciences and survey methods*. Cognitive aspects of survey methodology: Building a bridge between disciplines, 15, 73-100.

Vandaele, K. (2022). Vulnerable food delivery platforms under pressure: protesting couriers seeking "algorithmic justice" and alternatives. Forthcoming in Routledge Handbook of the Gig Economy, edited by I. Ness, New York, Routledge

Van Ees, H., & Bachmann, R. (2006). *Transition economies and trust building: a network perspective on EU enlargement*. Cambridge Journal of Economics, 30(6), 923-939.

Vitell, S. J. (2015). A case for consumer social responsibility (CnSR): Including a selected review of consumer ethics/social responsibility research. Journal of Business Ethics, 130(4), 767-774

Waterman, R. H. J., Waterman, J. A., & Collard, B. A. (1994). "Toward a Career-Resilient Workforce," *Harvard Business Review*, 72, 87-95.

Wilkinson, A., Dundon, T., Donaghey, J., & Freeman, R. (2014). Employee voice: Charting new terrain. The handbook of research on employee voice: Participation and involvement in the workplace, 1-16.

Witte, H. D. (1999). *Job insecurity and psychological well-being: Review of the literature and exploration of some unresolved issues*. European Journal of work and Organizational psychology, 8(2), 155-177.

Wood, A. J., Graham, M., Lehdonvirta, V., & Hjorth, I. (2019). *Good gig, bad gig: autonomy and algorithmic control in the global gig economy*. Work, Employment and Society, 33(1), 56-75.

Yeoman, R. (2014). *Conceptualising meaningful work as a fundamental human need*. Journal of Business Ethics, 125(2), 235-251.

Yoon, H. S., & Occena, L. G. (2015). *Influencing factors of trust in consumer-to-consumer electronic commerce with gender and age*. International journal of information management, 35(3), 352-363

Yousef, D. A. (1998). Satisfaction with job security as a predictor of organizational commitment and job performance in a multicultural environment. International journal of Manpower.

Yu, L., & Li, Y. (2022). Artificial Intelligence Decision-Making Transparency and Employees' *Trust: The Parallel Multiple Mediating Effect of Effectiveness and Discomfort*. Behavioral Sciences, 12(5), 127.

Zaheer, A., McEvily, B., & Perrone, V. (1998). *Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance*. Organization science, 9(2), 141-159.

Zhao, R., Benbasat, I., & Cavusoglu, H. (2019). Do users always want to know more? Investigating the relationship between system transparency and users' trust in advice-giving systems.

Zhu, G., So, K. K. F., & Hudson, S. (2017). *Inside the sharing economy: Understanding consumer motivations behind the adoption of mobile applications*. International Journal of Contemporary Hospitality Management

# **Appendixes**

# Appendix [1] - Measurements for trustworthiness expectations, willingness to pay a surplus, controls, and exemplary survey interface

- 1.1 Measures for Trustworthiness expectations (items) [7-point Likert Scale]
  - Competence Trust (Ability)
    - (C1) I think that this platform is successful in effectively and efficiently delivering my food.
      (C2) I Think that this platform is capable of meeting its responsibilities.
      (C3) I think that this platform performs its tasks competently.
  - Goodwill Trust (Benevolence/Integrity)
    - (G1) I think that this platform cares about my welfare and my satisfaction.
    - (G2) My needs and desires are very important for this platform.
    - (G3) I think that this platform will go out of its way to help its requesters.
    - (G4) This platform would never deliberately take advantage of its requesters.
    - (G5) This platform is guided by fair moral principles and ethical codes of conduct.
    - (G6) I think that executives' power is not abused in this platform.
    - (G7) This platform does not exploit external stakeholders.

Source: adjusted and adapted from Searle et al. (2011) and Schafheitle et al. (2020)

### 1.2 Measures for Willingness to Pay a Surplus - [7-point Likert Scale]

Q1. To what extent are you willing to pay a surplus for the services offered by Platform 1?

	1	2	3	4	5	6	7
Please select a level between 1 and 7	0	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0

Source: own measure Code: TRUSTSUR

## 1.2 Measures for Control Variables

• Requester Status

Q1. Are you a food consumer or a restaurant owner? (Food Consumer/Restaurant owner)

• Gender

Q2. Please select your gender. (Male/Female/Non-binary/Prefer not to say)

• Age

Q3. Please select your age. (18-24 (1); 25-34 (2); 35-44 (3); 45-54 (4); 55-64 (5); 65-74 (6))

• Country

Q4. In which country do you currently reside? (All choices)

Source: Qualtrics Codes: RequesterStatus, Gender, Age1 (classes regrouped in a scale from 1 to 6), Country

• Trust Propensity

Q5. To what extent are you prone to Trust someone in online relationships?

	1	2	3	4	5	6	7
Please select a level between 1 and 7	0	$\bigcirc$	0	$\bigcirc$	0	$\bigcirc$	$\bigcirc$

Sources: own measure Code: TrustPropensity\_1

# 1.4 Exemplary Survey Interface

• Instructions

You are asked to answer to several questions related to the assessment of the 3 hypothetical scenarios (vignettes) presented below (you will be assigned to 3 random vignettes, each corresponding to a particular

food-delivery platform, out of a total of 16 possible vignettes, in a random order, e.g., #5-#16-#9). Please read carefully each vignette before providing your answers.

• Intro

*Mr.* Petrella wants to order a pizza from an online food-delivery app. He can only choose between 3 different platforms, but he is quite uncertain about which alternative to pick. As if you were Mr. Petrella, please evaluate the 3 platforms and choose the best alternative as a consumer basing on each combination of design principles.

• Platform #1

The platform does not offer to gig workers a say in the decision-making processes relating to their work and managerial issues. The company is not investing in any learning or training activity to develop, motivate, and integrate gig workers in the organization. In this platform, gig workers are not covered by any insurance and do not receive any perk, benefit, or employment guarantee. Lastly, managers do not organize any activity to provide support about rules and logics behind algorithmic management decisions.

## Q1. To what extent are you willing to pay a surplus for the services offered by Platform 1?

	1	2	3	4	5	6	7
Please select a level between 1 and 7	0	0	0	$\bigcirc$	0	$\bigcirc$	$\bigcirc$

Q2. To what extent do you agree with the following statements about Platform 1?

	1	2	3	4	5	6	7
I think that this platform is successful in effectively and efficiently delivering my food. (1)	0	0	0	0	0	0	0
I think that this platform is capable of meeting its responsibilities. (2)	$\bigcirc$						
I think that this platform performs its tasks competently. (3)	$\bigcirc$						
I think that this platform cares about my welfare and my satisfaction. (4)	$\bigcirc$						
My needs and desires are very important for this platform. (5)	$\bigcirc$						
I think that this platform will go out of its way to help its requesters. (6)	$\bigcirc$						
This platform would never deliberately take advantage of its requesters. (7)	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
This platform is guided by fair moral principles and ethical codes of conduct. (8)	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
I think that executives' power is not abused in this platform. (9)	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
This platform does not exploit external stakeholders. (10)	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

# Appendix [2] – Data Frequencies

# 2.1 Vignette Frequencies



# 2.2 Controls Frequencies











# **Appendix [3] – Cognitive Interviews**

# Interview questions for cognitive validation

1) To what extent do you think that the constructs in the vignettes are a valid representation of the variables in question? How can this be improved?

2) To what extent are the vignettes clear, unambiguous, and understandable for respondents? What can be improved?

3) Do you think the vignettes represent a feasible and realistic decision-making situation?

4) How would you summarize the decision-making situation represented by the vignettes in your own words?

5) Which should be the right order to introduce and present variables/vignettes to make them clearer?

6) Do you think that the information sheet provides clear and sufficient information to the respondent to understand the survey? What could be changed?

7) Do you think that the information sheet and vignettes provide clear and sufficient information to the respondent to make a reasoned and realistic judgement? What could be changed?

8) Do you think that all respondents would answer to the questions in a consistent way?

9) Do you think all respondents would answer to the questions in line with our purpose?

10) To what extent do you think respondents will be able to retrieve relevant information from their memory by reading the vignettes? What can be improved?

11) Do you think respondents will be confident about answering to the survey questions?

12) What other biases could respondents show while filling the survey in terms of understanding, judging, and answering? How can they be faced?

# Appendix [4] – Regression Results (full tables & charts)

# 4.1 Descriptives & Correlation Matrix

**Codes**: TRUSTSUR=Willingness to Pay; X1=Workers' Voice; X2=Training; X3=Job Security; X4=Algorithmic Transparency

	Ν	Minimum	Maximum	Mean	Std. Deviation							
TRUSTSUR	198	1	7	4,22	1,680							
CompetenceTrust	198	1,00	7,00	4,5707	1,51000							
GoodwillTrust	198	1,00	7,00	4,4053	1,40189							
X1	198	0	1	,49	,501							
X2	198	0	1	,53	,501							
X3	198	0	1	,49	,501							
Х4	198	0	1	,53	,501							
RequesterStatus=Restaurant Owner	198	,00	1,00	,0606	,23921							
Gender=Female	198	,00	1,00	,3636	,48227							
Age1	198	1	6	2,08	1,432							
Trust Propensity_1	198	1	7	4,08	1,378							
Valid N (listwise)	198											

#### **Descriptive Statistics**

	Correlation Matrix												
									RequesterStatus			Trust	
		TRUS	Competen	Goodwi					=Restaurant	Gender=	Ag	Propen	
		TSUR	ceTrust	llTrust	X1	X2	Х3	X4	Owner	Female	e1	sity_1	
Correl	TRUSTSUR	1,000	,743	,666	,1	,5	,4	,2	,093	,257	,1	,210	
ation					84	06	35	11			32		
	CompetenceTrus	,743	1,000	,623	,0	,5	,3	,2	,040	,148	-	,235	
	t				87	84	81	82			,0		
											52		
	GoodwillTrust	,666	,623	1,000	,2	,1	,4	,3	,123	,124	-	,242	
					94	85	23	71			,1		
											23		
	X1	,184	,087	,294	1,	-	,0	,0	,090	,099	,1	,027	
					00	,0	00	01			11		
					0	39							
	X2	,506	,584	,185	-	1,	,0	-	-,055	,088	-	,089	
					,0	00	31	,0			,0		
					39	0		13			13		
ХЗ	,435	,381	,423	,0	,0	1,	-	,214	,092	,0	,100		
-----------------	------	-------	-------	----	----	----	----	-------	-------	----	-------		
				00	31	00	,0			54			
						0	10						
X4	,211	,282	,371	,0	-	-	1,	,030	-,080	-	,141		
				01	,0	,0	00			,0			
					13	10	0			42			
RequesterStatus	,093	,040	,123	,0	-	,2	,0	1,000	,072	-	,032		
=Restaurant				90	,0	14	30			,0			
Owner					55					13			
Gender=Female	,257	,148	,124	,0	,0	,0	-	,072	1,000	,2	,210		
				99	88	92	,0			47			
							80						
Age1	,132	-,052	-,123	,1	-	,0	-	-,013	,247	1,	,136		
				11	,0	54	,0			00			
					13		42			0			
Trust	,210	,235	,242	,0	,0	,1	,1	,032	,210	,1	1,000		
Propensity_1				27	89	00	41			36			

# 4.2 Regression Results for Willingness to Pay

Model Summary <sup>b</sup>									
			Adjusted R	Std. Error of the					
Model	R	R Square	Square	Estimate	Durbin-Watson				
1	,748 <sup>a</sup>	,559	,543	1,136	1,568				

a. Predictors: (Constant), Trust Propensity\_1, X1, X2, X3, X4, Age1, Gender=Female

b. Dependent Variable: TRUSTSUR

### **ANOVA**<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	311,096	7	44,442	34,448	,000 <sup>b</sup>
	Residual	245,126	190	1,290		
	Total	556,222	197			

a. Dependent Variable: TRUSTSUR

b. Predictors: (Constant), Trust Propensity\_1, X1, X2, X3, X4, Age1, Gender=Female

### **Coefficients**<sup>a</sup>

				Standardized		
		Unstandardize	d Coefficients	Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1,414	,294		4,809	,000
	X1	,601	,163	,179	3,683	,000
	X2	1,634	,163	,487	10,022	,000
	X3	1,342	,163	,400	8,243	,000
	X4	,766	,165	,228	4,658	,000
	Gender=Female	,530	,179	,152	2,969	,003
	Age1	,074	,059	,063	1,250	,213
	Trust Propensity_1	,060	,062	,049	,969	,334

a. Dependent Variable: TRUSTSUR

#### **Residuals Statistics**<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	Ν
Predicted Value	1,61	6,95	4,22	1,257	198
Residual	-3,673	2,580	,000,	1,115	198
Std. Predicted Value	-2,081	2,174	,000	1,000	198
Std. Residual	-3,234	2,271	,000	,982	198

a. Dependent Variable: TRUSTSUR

## 4.3 Regression Results for Competence Trust

Model Summary <sup>b</sup>									
			Adjusted R	Std. Error of the					
Model	R	R Square	Square	Estimate	Durbin-Watson				
1	,770 <sup>a</sup>	,593	,578	,98042	1,829				

a. Predictors: (Constant), Trust Propensity\_1, X1, X2, X3, X4, Age1, Gender=Female

b. Dependent Variable: CompetenceTrust

	ANOVAª									
Model		Sum of Squares	df	Mean Square	F	Sig.				
1	Regression	266,544	7	38,078	39,614	,000 <sup>b</sup>				
	Residual	182,633	190	,961						
	Total	449,177	197							

a. Dependent Variable: CompetenceTrust

b. Predictors: (Constant), Trust Propensity\_1, X1, X2, X3, X4, Age1, Gender=Female

### **Coefficients**<sup>a</sup>

				Standardized		
		Unstandardize	d Coefficients	Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	2,205	,254		8,688	,000
	X1	,329	,141	,109	2,336	,021
	X2	1,699	,141	,563	12,072	,000
	X3	1,065	,141	,353	7,576	,000
	X4	,845	,142	,280	5,948	,000
	Gender=Female	,251	,154	,080,	1,627	,105
	Age1	-,103	,051	-,098	-2,032	,044
	Trust Propensity_1	,114	,053	,104	2,144	,033

a. Dependent Variable: CompetenceTrust

### **Residuals Statistics**<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	Ν
Predicted Value	2,1127	6,9738	4,5707	1,16319	198
Residual	-2,66735	3,00467	,00000,	,96284	198
Std. Predicted Value	-2,113	2,066	,000,	1,000	198
Std. Residual	-2,721	3,065	,000	,982	198

a. Dependent Variable: CompetenceTrust

# 4.4 Regression Results for Goodwill Trust

Model Summary <sup>b</sup>								
			Adjusted R	Std. Error of the				
Model	R	R Square	Square	Estimate	Durbin-Watson			
1	,705ª	,497	,478	1,01238	1,578			

a. Predictors: (Constant), Trust Propensity\_1, X1, X2, X3, X4, Age1, Gender=Female

b. Dependent Variable: GoodwillTrust

	ANOVAª									
Model		Sum of Squares	df	Mean Square	F	Sig.				
1	Regression	192,428	7	27,490	26,821	,000 <sup>b</sup>				
	Residual	194,734	190	1,025						
	Total	387,162	197							

#### a. Dependent Variable: GoodwillTrust

b. Predictors: (Constant), Trust Propensity\_1, X1, X2, X3, X4, Age1, Gender=Female

				Standardized		
		Unstandardized Coefficients		Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	2,396	,262		9,143	,000
	X1	,867	,145	,310	5,964	,000
	X2	,466	,145	,166	3,206	,002
	X3	1,147	,145	,410	7,905	,000
	X4	1,000	,147	,357	6,817	,000
	Gender=Female	,266	,159	,092	1,674	,096
	Age1	-,199	,052	-,203	-3,789	,000
	Trust Propensity_1	,138	,055	,136	2,516	,013

# **Coefficients**<sup>a</sup>

a. Dependent Variable: GoodwillTrust

Residuals Statistics <sup>a</sup>									
	Minimum	Maximum	Mean	Std. Deviation	Ν				
Predicted Value	2,0922	6,7717	4,4053	,98833	198				
Residual	-3,47856	2,10155	,00000,	,99423	198				
Std. Predicted Value	-2,340	2,394	,000	1,000	198				
Std. Residual	-3,436	2,076	,000	,982	198				

a. Dependent Variable: GoodwillTrust



Normal P-P Plot of Regression Standardized Residual



Regression Standardized Predicted Value



Dependent Variable: Competence Trust

Scatterplot





Scatterplot Dependent Variable: GoodwillTrust **Regression Standardized Residual** 2 0 • -2 . 0 • . -4 -3 -2 0 2 -1 1 3



# 4.6 Collinearity Diagnostics

	Coefficients <sup>a</sup>									
		Unstand	Unstandardized							
		Coeffi	cients	Coefficients			Collinearity	Statistics		
Model		В	Std. Error	Beta	t	Sig.	Tolerance	VIF		
1	(Constant)	1,414	,294		4,809	,000				
	X1	,601	,163	,179	3,683	,000	,980	1,020		
	X2	1,634	,163	,487	10,022	,000	,983	1,018		
	X3	1,342	,163	,400	8,243	,000	,984	1,017		
	X4	,766	,165	,228	4,658	,000	,966	1,036		
	Gender=Female	,530	,179	,152	2,969	,003	,884	1,132		
	Age1	,074	,059	,063	1,250	,213	,921	1,086		
	Trust	,060	,062	,049	,969	,334	,911	1,098		
	Propensity_1									

a. Dependent Variable: TRUSTSUR

			Coef	ficients <sup>a</sup>				
		Unstand	lardized	Standardized				
		Coeffi	cients	Coefficients			Collinearity	Statistics
Model		В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	2,205	,254		8,688	,000		
	X1	,329	,141	,109	2,336	,021	,980	1,020
	X2	1,699	,141	,563	12,072	,000	,983	1,018
	X3	1,065	,141	,353	7,576	,000	,984	1,017
	X4	,845	,142	,280	5,948	,000	,966	1,036
	Gender=Female	,251	,154	,080,	1,627	,105	,884	1,132
	Age1	-,103	,051	-,098	-2,032	,044	,921	1,086
	Trust	,114	,053	,104	2,144	,033	,911	1,098
	Propensity_1							

a. Dependent Variable: CompetenceTrust

	Coefficients <sup>a</sup>									
	Unstandardized		Standardized							
		Coefficients		Coefficients			Collinearity	Statistics		
Model		В	Std. Error	Beta	t	Sig.	Tolerance	VIF		
1	(Constant)	2,396	,262		9,143	,000				
	X1	,867	,145	,310	5,964	,000	,980	1,020		

X2	,466	,145	,166	3,206	,002	,983	1,018
X3	1,147	,145	,410	7,905	,000,	,984	1,017
X4	1,000	,147	,357	6,817	,000	,966	1,036
Gender=Female	,266	,159	,092	1,674	,096	,884	1,132
Age1	-,199	,052	-,203	-3,789	,000	,921	1,086
Trust	,138	,055	,136	2,516	,013	,911	1,098
Propensity_1							

a. Dependent Variable: GoodwillTrust

### 4.7 Results of Post-Hoc Analyses

• Model 4 (only with controls)

# Model Summary<sup>b</sup>

			Adjusted R	Std. Error of the	
Model	R	R Square	Square	Estimate	
1	,819 <sup>a</sup>	,671	,662	,977	

a. Predictors: (Constant), Trust Propensity\_1, Age1, CompetenceTrust,

Gender=Female, GoodwillTrust

b. Dependent Variable: TRUSTSUR

	ANOVAª										
Model		Sum of Squares	df	Mean Square	F	Sig.					
1	Regression	372,982	5	74,596	78,162	,000 <sup>b</sup>					
	Residual	183,241	192	,954							
	Total	556,222	197								

#### a. Dependent Variable: TRUSTSUR

b. Predictors: (Constant), Trust Propensity\_1, Age1, CompetenceTrust, Gender=Female,

GoodwillTrust

	Coefficients"									
		Unstandardized		Standardized						
	Coefficients		Coefficients			Collinearity	Statistics			
Model		В	Std. Error	Beta	t	Sig.	Tolerance	VIF		
1	(Constant)	-,698	,309		-2,260	,025				
	CompetenceTrust	,583	,059	,524	9,812	,000	,601	1,664		
	GoodwillTrust	,433	,065	,362	6,698	,000	,589	1,698		
	Gender=Female	,342	,153	,098	2,236	,026	,890	1,124		

# ficiont-a

Age1	,218	,051	,186	4,264	,000	,900	1,111
Trust	-,057	,054	-,047	-1,066	,288	,885	1,130
Propensity_1							

a. Dependent Variable: TRUSTSUR

• Model 5 (with controls and previous independent variables)

## Model Summary<sup>b</sup>

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	,844 <sup>a</sup>	,712	,699	,922

a. Predictors: (Constant), X4, X1, X3, X2, Age1, Trust Propensity\_1,

Gender=Female, GoodwillTrust, CompetenceTrust

b. Dependent Variable: TRUSTSUR

	ANOVAª										
Model		Sum of Squares	df	Mean Square	F	Sig.					
1	Regression	396,256	9	44,028	51,744	,000 <sup>b</sup>					
	Residual	159,966	188	,851							
	Total	556,222	197								

a. Dependent Variable: TRUSTSUR

b. Predictors: (Constant), X4, X1, X3, X2, Age1, Trust Propensity\_1, Gender=Female, GoodwillTrust,

#### CompetenceTrust

### **Coefficients**<sup>a</sup>

		Unstand	Unstandardized					
		Coeffi	Coefficients				Collinearity	Statistics
Model		В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-,424	,301		-1,406	,161		
	CompetenceTrust	,345	,075	,310	4,607	,000	,338	2,962
	GoodwillTrust	,449	,073	,375	6,195	,000	,418	2,394
	Gender=Female	,324	,146	,093	2,211	,028	,866	1,155
	Age1	,199	,050	,169	4,002	,000	,855	1,169
	Trust	-,042	,051	-,034	-,817	,415	,875	1,143
	Propensity_1							
	X1	,098	,144	,029	,677	,499	,825	1,212
	X2	,838	,177	,250	4,736	,000	,550	1,819
	Х3	,459	,159	,137	2,887	,004	,680	1,471
	X4	,026	,153	,008	,168	,867	,739	1,354

a. Dependent Variable: TRUSTSUR