*Pubished by:*
**FEPS - Foundation for European Progressive Studies**
Rue Montoyer 40 - 1000 Brussels, Belgium

*Edited by:* Werner Wobbe, Elva Bova,
and Catalin Dragomirescu-Gaina

*Page layout:* Triptyque – Belgium

**ISBN**: 978-2-930769-17-2

*This book is produced with*
*the financial support of the European Parliament*

---

THE DIGITAL ECONOMY AND THE SINGLE MARKET

*Employment prospects and working conditions in Europe*

# THE DIGITAL ECONOMY AND THE SINGLE MARKET

---

*EMPLOYMENT PROSPECTS AND WORKING CONDITIONS IN EUROPE*

# THE DIGITAL ECONOMY AND THE SINGLE MARKET

## *EMPLOYMENT PROSPECTS AND WORKING CONDITIONS IN EUROPE*

**Ernst Stetter**: Foreword **9**

**Werner Wobbe**: Digitalisation of work
and the social impact of the platform economy **13**

### *Chapter I*
### *Platform employment and crowd sourcing*

**David Durward**, **Ivo Blohm** and **Jan Marco Leimeister**
Principal forms of crowdsourcing and crowdwork **39**

**Sahil Deva** and **Veronika Wasza**
Testbirds – Software testing solutions
in the crowdsourcing industry **56**

**Ursula Huws**
New forms of platform employment **65**

### *Chapter II*
### *Crowd working in the digital economy*

**Kristy Milland**
Crowd work: The fury and the fear **83**

**Ursula Holtgrewe**
Working in the low-paid service sector:
What is to be learned from the analogue world? **93**

**Irene Mandl**
Working conditions in crowd employment
and ICT-based mobile work **111**

## *Chapter III*
## *Innovation and the Digital Single Market Agenda of the European Commission*

**Torben Schenk**
The European Dimension of Digital Work **141**

**Allan Mayo**
The transformation to a digital economy: The need for
a contextualised and holistic approach to policy **153**

**Jari Kuusisto**
Digitalisation and industrial renewal –
Challenges and opportunities for businesses,
employees and the public sector **172**

## *Chapter IV*
## *What to do about digital employment*

**Jutta Steinrück** (MEP)
European Parliament’s EMPL opinion
“Toward a Digital Single Market Act” **189**

**Oliver Röthig**
What to do about digital employment -
The position of UNI and its global approach **201**

**Werner Wobbe**
Conclusions on digital employment **211**

# NEW FORMS OF PLATFORM EMPLOYMENT OR CROWD WORK

URSULA HUWS

## Abstract

This chapter examines recent developments in work organised through online platforms, demonstrating how this new form of work has evolved from the convergence of several existing trends. These include the spread of ICTs and new global communications norms, standardisation of tasks and performance measures and the breakdown of spatial and temporary boundaries. It goes on to show the heterogeneity of crowd working, including the wide range of work, both online and offline, that is now managed via online platforms and the variety of forms of payment and employment relationships that currently exist in this exponentially growing field.

## Introduction

In a confusing flurry of terminology, ‘crowdsourcing’, also known as the ‘gig economy’, ‘platform economy’ and a myriad other terms, burst into public awareness about half a decade after the 2007-8 financial crisis, appearing as a new and unprecedented phenomenon. Originally thought of as part of a socially innovative ‘sharing economy’, the reality that online platforms were being used as a means to manage employment came as a sudden shock to many commentators.

As attempts are made to understand the new world of digital labour, it is easy to jump to two conclusions: that this is an entirely new form of work organisation; and that it takes a single, universal form. Combining these leads to the further conclusion that once this new form of work has been defined precisely then it will be possible to adapt existing practices and norms, or develop new ones, to enable it to be properly regulated.

This chapter attempts to show that both of these assumptions are mistaken.

First, it argues that crowdsourcing did not spring from nowhere but developed from a number of pre-existing trends which are now converging to generate critical mass.

Then it summarises the existing empirical evidence to demonstrate that it does not take a single form but, on the contrary, encompasses a range of different employment practices with strong variations, with the aim of identifying some of the key variables.

## The roots of crowd work

The development of online platforms that are used to co-ordinate labour would not have been possible without a number of disparate pre-existing economic, technological and organisational trends on both the supply and demand sides of the labour market and in society more generally.

## Spread of ICTs, digital skills and global communications norms

One of the most obvious preconditions for the development of online platforms has been the global spread of Information and Communications Technologies (ICTs) resulting in a situation where it is predicted that the global smartphone penetration per capita will reach 34.2 per cent by 2017, reaching 65 per cent in Western Europe[1].

At the simplest level, this means that a very high proportion of the population now has access to the Internet from multiple locations and can, in principle, be contacted at any time and any place for work-related purposes. However it also represents the cumulative impact of a number of other trends which have led to the development of a global digitally literate workforce.

The diffusion of ICTs has also been associated with the spread of standard software packages. On the labour supply side, education programmes have aimed to teach the skills to use these, while familiarity with the technology has also led to the acquisition of other, more generic, ITC skills (such as skills to search on the internet, register one's details on online platforms etc.). Knowledge of the Internet has gone hand in hand with knowledge of global languages, especially English. The growth in the global supply of workers with the appropriate digital and language skills has been matched on the demand side by employers' willingness to outsource work, and to simplify and standardise tasks to make them amenable to be carried out remotely. The global sourcing of digitised tasks expanded rapidly during the 1990s (partly driven by the need for a large numbers of software engineers to cope with the conversion of European currencies to the euro and preparing for the 'Millennium bug') and had become a normal business practice by the 2000s, affecting a large range of back-office, software and creative functions.

Reliance on ICTs has not been limited to digitised tasks. Even for manual workers, labour market participation has become increasingly dependent on the use of ICTs, including for job search, application, filing of cvs and communication with employers and clients. The rise in unemployment following the financial crisis, combined with the effects of austerity and more targeted labour market policies have led to a number of initiatives across Europe aiming at encouraging the unemployed to use online means to find work.

In short, the smartphone and/or tablet and/or laptop or desktop computer, and the skills to use them, have become indispensable tools for labour market participation and work performance for a majority of the European workforce and a substantial and growing minority of the world's workforce.

## Growth of teleworking

First studied as a minority practice in the 1980s, the use of ICTs to work remotely has now spread to become a taken-for-granted aspect of many jobs. No longer an activity that takes place only on the employer's premises during set hours, many work tasks can now be carried out regardless of time and place, blurring the boundaries between work and leisure. A home office is now a normal feature of many households and the provision of wifi increasingly expected in cafes, hotels, stations airports and other public spaces. Organisational practices have been adjusted to take account of this new reality, for example by organising work into projects assigned to virtual teams and planning offices on a 'hot desk' principle.

## Increasing use of standardised performance indicators

Another important trend that has developed over the last three decades has been the increasing use of standardised performance indicators to measure and monitor work, in both the public and private sectors.

Sometimes this is linked to outsourcing, and embedded in the terms of contracts, for instance the service level agreements in outsourced call centres which stipulate how quickly calls must be answered, or contracts for cleaning services that specify how many rooms should be cleaned, how quickly.

Sometimes it is connected with establishing standards that are used for comparison between different organisations, for instance in hospitals or schools where targets are established for the number of patients seen or the number of students reaching specified standards in examinations. The use of customer ratings has played an increasingly important role in the measurement of quality standards, used as a means of staff appraisal and discipline as well as for comparing different companies or institutions, ranging from fast food outlets to universities.

Across a wide range of different industries, the use of such indicators has now become a normal aspect of work culture.

## Increasing use of online management systems

Another trend that has spread rapidly in recent years has been the use of online management systems for logging work progress and for assigning workers to shifts on a just-in-time basis. This is particularly widespread in service industries, such as the retail and hospitality sectors, where the need for staff to be available at particular workstations fluctuates according to changes in consumption patterns.

In some countries it is associated with the use of zero hours or ‘on call’ contracts, for example in call centres, supermarkets, warehouses and café chains. However the need to ‘log on’ to register when one is working (or available for work) and ‘accept’ new tasks is not limited to these sectors but can be found in many industries. The use of online systems to register the starting and stopping times of shifts and the location where work takes place also generates data allowing workers to be monitored, thus generating new performance indicators, which can be linked to the targets described above.

## Migration online of traditional forms of intermediation

Labour markets have traditionally relied on a large variety of different forms of intermediation, including directories, agencies and various forms of advertising. Some of these are highly specialised (such as literary agents, art dealers  or the classified advertising sections of trade journals) while others are fairly generic (such as entries in the business pages of telephone directories, leaflets delivered through letterboxes or advertisements placed in the window of a local shop).

For many self-employed individuals, such methods, along with personal recommendations from past customers, were the main means of finding employment in the past. In recent decades, some of these intermediary organisations have moved online and set up websites which more or less replicate previous print-based or telephone-based means of accessing information; others have eroded. The online environment is, however, very different from its offline equivalent.  Unless they have exceptionally loyal and knowledgeable users, who have remembered or bookmarked the url, they are only likely to be found if they come to the top of the list produced by the search engine. In a world in which all searches start with google, small advertisers stand a very poor chance of being discovered by new clients.

Many self-employed workers, ranging from graphic designers to window-cleaners, from book-keepers to dog-walkers, now find themselves deprived of many of their traditional means of finding work, often pushed to use whatever sites appear at the top of the ranking to find their clients.

## Conclusion

Taken together, these trends have created the preconditions for the online employment platforms currently taking place. On the one hand, working conditions in traditional forms of employment have taken on a range of new features, with workers increasingly expected to be available to work at any time, in any place, with their tasks standardised and measured, often using customer ratings, and expected to log on to online systems to report for and receive work. On the other hand, work in the informal economy is increasingly formalised, dragged into the scope of operations of corporate intermediaries using standardised measures for defining tasks and classifying workers' skills. With diverse roots in different industrial settings, a new model of labour market organisation is in the making.

## Convergence: current trends in crowd work

The previous section outlined some of the trends which are converging to produce new conditions on the global labour market. However these are still in the process of formation, with many different competing business models, experiments and false starts. The landscape is a turbulent one, whose long-term character is not yet visible. Nevertheless some patterns can already be discerned.

One of these is a very strong trend of concentration. Online platforms rely heavily on a network effect, whereby the better known a brand is, the more likely it is to be present in any given locality so the more likely customers are to choose it. This creates a ‘winner take all’ effect, making it difficult, once a brand is well-established, for competitors to obtain a foothold in the market. Well-known examples of platforms that have benefitted from this effect are Airbnb, Uber and Etsy. This trend towards consolidation (if not monopolisation) has led to several mergers and takeovers among leading platforms. For example eLance merged with Odesk in December 2013 to form a single company that has now been renamed Upwork. Similarly the German-based Helpling merged with UK-based Hassle to form what they describe as ‘the world’s biggest home-cleaning marketplace’[2] in July, 2015.

Another trend has been a move away from a model based on the notion that online platforms are co-ordinating citizen-to-citizen ‘sharing’ of resources or skills, towards one in which they are providing professional services to business clients. However in a field in which new models continue to emerge and evolve, it is difficult to make categorical generalisations. Platforms providing opportunities for volunteering or unpaid work carried out for altruistic or self-promotional reasons continue to co-exist with others providing paid work for both business and private clients.

The next section focuses on those platforms that organise paid work and looks in more detail at the range of activities covered, the employment practices and the forms of work organisation involved.

## The heterogeneity of crowd work

It is clear that the online platforms currently in place have evolved from many different sources and it is thus no surprise that the kinds of work co-ordinated by them are also highly hetereogenous. Very little systematic quantitative research has taken place to estimate their extent, the characteristics of their workforce or the prevalence of particular organisational practices. We are thus dependent on anecdotal evidence for much of this information, derived from journalistic articles, the trade press and the companies' own websites. Nevertheless, there is now a sufficient body of evidence to illustrate the diversity of crowd work and identify some of the key variables.

## Professional diversity

Online platforms are used to co-ordinate a wide variety of different kinds of work, ranging from highly-qualified professional services to unskilled manual work. At the high end can be found companies like Axiom, which provides legal services, Heal and Medicast providing medical services, the Business Talent Group, providing senior executives and Eden McCallum providing management consultancy. Lower down the scale can be found companies such as Handy, Taskrabbit, Helpling and Hassle which provide simple services such as cleaning, running errands or basic household maintenance tasks. In between can be found a vast array of occupational categories including teachers, cooks, tree surgeons hairdressers, translators and film editors.

This occupational diversity also implies a diversity in terms of social class, which is amplified when national and ethnic differences are taken into account. For example, both the local cost of living and the local social status are likely to be very different for, for instance, an IT worker based in New York or Berlin and his or her counterpart based in Pakistan or Bolivia, who may be competing directly with each other for work on the same online platform but whose similar earning power may translate into very different purchasing power in the local context.

## Diverse routes into crowd work

Just as it is impossible to define a ‘typical’ occupational profile for a crowd worker, it is also impossible to characterise a ‘typical’ motivation for seeking this type of work or route into crowd work.

Some crowd workers are established freelancers who have found their traditional means of finding employment drying up and converted (sometimes reluctantly) to this new form of intermediation in order to continue a career trajectory that was already established using other means. Others are people who already have an existing job who see crowd working as a way of earning some extra income in their existing occupation. Yet others see it as a way of trying out a new occupation – perhaps to explore whether something that is currently a hobby could turn into a source of income in the future. Finally, there are people who are simply desperate for any source of income and will take anything they can get, some of whom may have registered on multiple platforms in the hope of receiving some job offers.

Again, it is necessary to take into account the very different situations of people based in different countries. In a low-wage country, for instance in South Asia, Africa, Central Asia or South America, work obtained through online platforms may provide a higher income than work in the local formal economy and may be sought out as a stepping stone to a better future, in some cases as an intermediate step towards becoming an employer.

## Online or offline

One broad distinction that can be drawn between different platforms is whether they the work they are organising is carried out online or offline.

Online work includes a variety of different kinds of clerical, professional and creative work that can be carried out independently of location. All that is required to perform it is a computing device with internet access and a worker with technical and language skills that match the requirements of the client. Many of the best-known online platforms, such as Upwork, Amazon Mechanical Turk and Clickworker, fall into this category and tends to involve work for corporate clients.

Offline work includes a wide range of tasks that have to be carried out in particular locations. These may be carried out in public spaces,  for example taxi or delivery services, in the homes of private individuals, for example cleaning, gardening or household maintenance tasks, or on business premises, such as on-demand casual clerical or service work.

To make matters even more complicated, there are some services that require a mixture of online and offline work in varying proportions, for instance IT maintenance work and legal work.

In many cases the boundaries between work that is organised through online platforms and that which is organised by other means (such as temporary work agencies, traditional labour exchanges or freelance agencies such as translation bureaux) are extremely fuzzy.

## Temporary or permanent

There are also major variations in the degree of attachment of individual workers to the platforms through which they acquire work. In some cases each task is seen as the subject of a new contract, with the worker treated clearly as a freelancer with the ongoing relationship visible only in the form of a ‘reputation’ established on the basis of user ratings. In other cases workers are tied in to the company's identity much more fully, for instance by being pre-vetted, bound by explicit company rules, covered by corporate insurance or made to wear a uniform. In sectors where services are provided to people in their homes and a degree of trust is required, permanent employees are often preferred to temporary ones.

## Pay

There is no single model for payment on online platforms.

In some cases, rates of pay are negotiated between individual workers and their clients with the platform taking a percentage from either or parties. On some platforms, clients may ask workers to compete directly with each other in the form of a bid for a specific contract. On others, workers may advertise fixed charges for specific defined tasks.

In other cases, the rates for the work may be specified by the platform, either in the form of fixed rates for defined tasks or variable rates (as in Uber's notorious 'dynamic pricing model' using algorithms that adjust local rates according to demand in real time). In some cases, companies will use specialist estimators to intermediate between clients and workers and agree a firm price with the client.

Workers may be paid piece rates (by the job or the task) or, where the duration of the task is unpredictable, by the hour. The use of hourly rates is often accompanied by invasive surveillance (for example using screen capture or camcorder streaming for online work, or frequent checks via SMS messaging for offline work).

Other payment methods can also be found, for instance the use of ‘prizes’ for winners of crowdsourcing competitions, or, more rarely, royalties or a percentage of the profit made by an online ‘sponsor’. If they are not based in the USA or India, where alternative financial arrangements have been set up, workers for Amazon Mechanical Turk are not paid in money at all but in kind, in the form of Amazon gift tokens.

Not surprisingly, issues relating to pay are high among the complaints of crowd workers. One issue is non-payment of agreed fees in cases where work is ‘rejected’ by clients (who still, however, keep the intellectual property rights in the rejected work under the conditions imposed by several platforms). Non-payment may also occur if offline work is rejected by a client, for instance if a householder claims that a plumbing leak was not adequately fixed and the platform has to send out another worker, then the original worker may not be paid. Another common cause of complaint is delays in receiving payment. This is particularly prevalent in occupations, such as cleaning or taxi driving, where workers are used to being paid cash in hand and experience extreme cash flow problems if they have to wait several days or even weeks to receive online payment. Online forums in which crowd workers share their grievances also feature extensive discussions about payment which is lower than expected, because the estimated times per task are unrealistic, because hidden extras are not mentioned or for other reasons.

## Employment status

The employment status of crowd workers is, perhaps, the thorniest issue of all. This is partly because platform employment is growing up in precisely those parts of the economy where there are, in many countries, already anomalies relating to employment status, or at least difficulties in drawing precise definitions of it. This can be illustrated by three examples.

One of these relates to the position of freelance workers in creative industries. In the past, such workers have often been the subject of specific rules or institutional practices. These were set in place in recognition of the fact that creative workers constitute a special case. On the one hand they possess unique skills that cannot be delegated easily to others, and cannot therefore appropriately be classified alongside other self-employed workers (who can be seen as one-person enterprises with the possibility of taking on additional employees). On the other hand, the work that they do is often time-bound and project-based and not susceptible to the setting up long-term employment relationships. In the mid-20th century, such workers were often protected, to some extent, by ‘closed shop’ trade union agreements, or tight rules concerning their rights to receive royalties, performance fees or ‘residual’ payments. These rights have been eroded in the context of digitalisation, without alternative options being substituted. Meanwhile earnings have fallen, partly due to undercutting through the use of unpaid internships and use of labour based in low-wage economies but also due to appropriation of their intellectual property without recompense. The rise in de facto self-employment among creative workers does not appear to correlate with any corresponding rise in autonomy and self-direction or with genuine entrepreneurship (in the sense of being able to set up a business with employees) raising the question whether it should in fact be regarded as self-employment at all, at least for the purposes of the applicability of anti-competition law.

Another grey area in employment law, predating the development of the platform economy, is the position of on-call or zero-hours workers. An illegal practice in some European countries, and in others one that brings it clearly within the scope of employment law, this type of contract leaves workers with relatively few of the benefits available to permanent full-time employees with defined working hours, and blurs in many ways into the kinds of relationship more commonly found in crowd employment. Indeed, some might argue that the main difference between being a crowd worker and a zero-hours worker is that in principle the former has a greater right to refuse work offered at short notice.

A third illustration of the complexity of the application of employment laws to crowd work is the history of difficulties in categorising employment in the informal economy, from which many crowd workers are drawn. When workers have been recruited by word of mouth, under agreements made, if at all, in the form of verbal contracts and paid in irregular instalments, often in cash and without documentation, it has always been difficult to establish whether a formal contract of employment can be deemed to apply. Transferring such employment to the more formal environment of an online platform, where workers' hour and payments can be tracked, makes these problems more visible but does not necessarily render them unprecedented.

It could be said, therefore, that to some extent the development of the platform economy is bringing to a head issues that were already present. Nevertheless, online platforms do introduce some new dimensions to these existing problems.

First, they introduce third parties into what were previously bilateral arrangements, raising the question of who should be regarded as the employer: the client, the platform, some other intermediary or the worker.

Second, the nature of online platforms creates new asymmetries of power in the labour market. The scale of the platforms, their international scope, the impersonal nature of communication with them and the use of standardised procedures present workers with a series of 'take it or leave it' options. The lack of accountability of the platforms and the isolation and fragmentation of the workforce make it impossible to apply the concept of meaningful negotiation implied in traditional concepts either of an employment relationship or of a service contract between a self-employed worker and a client.

Historically, the concept of an employment relationship has been developed in the context of an implicit relationship modelled on that of a master and servant, in which the former gives directions to the latter in the context of a set of mutual responsibilities and obligations.

We must question how this concept can be applied to crowd work.

## Endnotes

1 Estimate quoted by Statistica. Accessed on 29 December, 2015 from http://www.statista.com/statistics/203734/global-smartphone-penetration-per-capita-since-2005/

2 Joint press release from Hassle.com and Helpling, July 1st, 2015. Available online at: https://hassle.com/uk/press/releases/hassle-helping-join-forces

FOUNDATION FOR EUROPEAN
PROGRESSIVE STUDIES
FONDATION EUROPÉENNE
D'ÉTUDES PROGRESSISTES

PHONE +32 (0)2 234 69 00
FAX +32 (0)2 280 03 83
INFO@FEPS-EUROPE.EU