

New forms of employment Casual work, UK

Case study 46: Slivers of Time

Crowdsourcing is a novel initiative involving the outsourcing of work tasks to an external network of online users. Slivers of Time is a software company providing technology that enables clients to build and manage talent pools for short-term fluctuations in staffing.

Introduction

The software company, [Slivers of Time](#), has been the subject of considerable research as well as media and policy interest as an innovative online platform for the ‘crowdsourcing’ of paid and unpaid work. Crowdsourcing refers to the outsourcing of an organisational function to an external network of online users (Green et al, 2013). Many other platforms have taken off in the UK in recent years, aimed at outsourcing a complex job to a ‘crowd’ of online workers or at hiring single workers from a crowd for an individual task. Different groups are targeted, including those outside the mainstream workforce – for example, people who are unemployed or retired, people with disabilities, as well as those in the mainstream workforce seeking additional work to top up their income or as a core source of support. It is not possible to say how widespread this practice is given its recent growth and the absence of measurement in the main official labour market statistics.

With the financial support of the UK government, Slivers of Time designed a software tool that facilitates the crowdsourcing of paid and unpaid work in real time. Initially, it started out in the late 1990s as a human resources (HR) tool designed to replace ostensibly expensive temporary work agency use by local authorities in London. Since then, Slivers of Time has expanded its client base across a range of public sector and voluntary organisations, including universities, the UK National Health Service (NHS) and housing associations, and has a handful of private sector clients too (see www.sliversoftime.com). The company aims to provide an eBay type model of labour allocation, where sellers of labour register their skills, experience and hourly price; client organisations or individual clients (that is, service users) then select the most suitable match at a time and price of their choosing.

The model raises a number of questions about how casual employment is managed and whether it can offer a fair experience of work. We explore these and other questions in this report, drawing on case study interviews with the software company, two public sector client organisations, a related recruitment agency and one worker who uses Slivers of Time to find casual work. Primary data analysis is supplemented by documentary evidence, including previous evaluations of Slivers of Time, company documentation and client reviews of using Slivers of Time.

General characteristics of Slivers of Time

Slivers of Time grew out of an initial piece of software development in the late 1990s with central government funding for the London Borough of Newham (Rowan, 2008). Its public brief was to develop an online labour market tool that could offer users ‘infinite flexibility in choosing their patterns of work’. Slivers of Time was subsequently founded in London as a private limited company by Wingham Rowan in 2006. It has since expanded its client portfolio to locations across the UK, with organisations from a range of sectors, though still mostly public sector organisations.

The company's primary service is to provide technology that enables its clients to build and manage talent pools for short-term fluctuations in staffing. For example, a supermarket chain may use the system to cover staff illness by building a talent pool and booking 'matched' workers at short notice. Their main competitor is [TaskRabbit](#), which provides a similar matching service. However, Slivers of Time has a unique selling point to clients in that it can match the hours of work in 'real time' – that is, the buyer can see which sellers are available at a specific point in time. We do not have any information about the number of clients but do know that Slivers of Time works with four temporary work agencies that act as an intermediary between buyers and sellers in many cases. The management of Slivers of Time workers through temporary work agencies makes it difficult to give specific details about the nature of workers using the system, although the senior manager did estimate that the majority work on a casual or self-employed basis as opposed to being directly employed by the client organisation.

Slivers of Time is founded on an innovative software platform and an observation that many people would like to work but are not available on a regular basis for standard hours. It describes itself as apolitical but nevertheless has profited from a close relationship with senior figures in the current coalition government elected in 2010. The company has been publicly championed by government ministers, secretaries of state and local authority leaders, including Eric Pickles (Secretary of State for Local Government), Lord Freud (Minister for Welfare) and Stephen Greenhalgh (Leader of Hammersmith and Fulham Council). For example, in one public announcement, Lord Freud stated:

'The current [welfare] benefits system and lack of flexibility has encouraged people to stay on benefits rather than take on a job. The principle of Slivers of Time – and schemes like it – represent a great way for people to build up mini-jobs in the official economy' (Watt, 2010).

Slivers of Time's connections with government may explain its selection for pilot projects with Job Centre Plus (the public sector job search offices) to design systems that generate work opportunities for lone parents and claimants with disabilities in line with benefit rules. It has also been selected for pilots associated with the Department of Health's personalisation agenda in the delivery of social care. As of 2014, Slivers of Time remains a small company, with just eight employees and a handful of external freelancers hired as and when needed. It is headed by a chief executive (new since late 2012, with prior experience at Apple Europe and Vodafone) and supported by a general manager who joined in early 2012 and is responsible for ensuring that the various client organisations achieve their desired quality of service. The team includes a number of people who transferred from local authorities where the platform was developed and others with a background in recruitment. The company's lack of leverage in terms of a large marketing function appears to be compensated by its political connections.

In this report, we investigated two clients of Slivers of Time, one located in the north of England (Council 1) and the other in the south (Council 2). Both are longstanding local authorities of and provide a range of statutory services including education, housing, transport planning, social services, libraries, leisure, and waste collection and disposal. Council 1 and Council 2 have a workforce of approximately 15,000 and 10,000 people, respectively, who work under council terms and conditions of employment and are therefore paid through public funds.

In both cases, temporary work agencies are used to manage an incumbent workforce, so there is segmentation of the workforce by legal definition between those employed directly by the council and those who are casual workers employed by a temporary work agency. However, temporary work agencies may represent only a small proportion of total employment; in Council 1, for example, it represents 5% of the overall workforce budget (according to Council 1 documentation). Trade unions are recognised at both organisations and play a strong role in pay determination as well as in shaping other employment terms and conditions. Both organisations also have a formal HR department, typical of a local authority structure, and both are members of the national employers' body, the Local Government Association.

The interviewed worker is a woman aged 68 years-old, who is retired and has used Slivers of Time for two years. Before retirement, she worked in an office doing general administrative work and had also

worked in a self-employed capacity offering ‘dog-sitting’ services. Slivers of Time allowed her to top up her income but also allowed her to work at times when she did not have dog-sitting duties.

Design and implementation process

Slivers of Time is a registered private limited company and is not subject to any legal conditions (in the UK context and at the time of data collection in April 2014). Its purpose is to provide matching software and it is not involved in the operational side of people management, which is why temporary work agencies play a vital role in many cases.

The initial idea behind the founding of Slivers of Time was that, while the internet had enabled a revolution in the consumption of products and services, it had not yet been extended to the trading of people’s time for productive work. While seemingly a neutral technological innovation, Slivers of Time has shrewdly pinpointed a target market that reflects changes in labour market conditions, reforms to welfare benefits, workforce composition and job search behaviour. The senior manager highlighted the sociopolitical underpinnings of the company with its focus on strengthening job seekers’ individualism and freedom of choice.

From the outset, a key goal of Slivers of Time has been to target a pool of potential labour (‘sellers of time’) who, for various reasons, are unavailable for regular part-time or full-time working hours. Reasons include caring responsibilities for children or elderly dependants, long-term sickness or illness that recurs in unpredictable cycles, or changing study and training schedules. There are no readily available data on the composition of individuals registered with the website, but several reports emphasise its attractiveness to people with disabilities and lone parents (Watt, 2010). In 2010, the company’s founder stated: ‘There are millions of people who need to work in a fragmented way; some of these people are real assets but they can be excluded from the labour market’ (, Watt, 2010). Around half the pool of workers register for paid work and the rest for voluntary work.

Moreover, the senior representative of Slivers of Time observed that one consequence of the recent recession was a growth in self-employment and part-time work, with an increasing number of people experiencing underemployment of their potential time availability and a need therefore to seek flexible top-ups. The vision for the future was very much one of a large share of self-employed workers seeking work with multiple clients, replicating a purported model of the creative sectors (especially media for example) in the low-wage sectors of retail and hospitality. The interviewed worker is reflects the pool of retired people who are seeking to top up what is often a small pension income by selling units of time as and when they are available.

Competitive advantage

According to the senior manager from Slivers of Time, there are no comparable companies offering a real-time crowdsourcing platform for managing work allocation. The closest mentioned is the company TaskRabbit. Because of its focus on securing contracts with major client organisations, the main competitors are in fact the temporary work agencies that typically organise casual work placements for client organisations. However, Slivers of Time claims to charge a far lower transaction cost for its services. Its advantage, it claims, is that it bases a charge on the per minute labour use while many agencies make a daily charge regardless of hours placed. A further advantage is that it can be accessed through mobile phones as well as computers.

Slivers of Time also aims to replace existing in-house systems of managing casual labour pools. These typically involve rudimentary systems for requesting incumbent staff to cover for unplanned absences of colleagues. The Slivers of Time IT platform can be adapted to manage incumbent teams to find the best fit between time availability and expertise. This is precisely the goal of one major supermarket chain, Tesco, which signed up in 2010 to use the Slivers of Time platform. Tesco uses the platform to secure the most appropriate allocation of staff available and experienced to fill temporary positions, from sales assistant to store manager cover through to overtime work.

Developing a client base

Slivers of Time worked closely with local authorities in the 2000s to develop software systems that could facilitate the implementation of the government’s personalisation agenda for the delivery of

social care. Personalisation is a new approach that seeks to ensure that individual users of social care have greater choice and control through managing personal budgets, among other issues. The most recent data show that 43% of users of local authority funded social care received a personal budget in 2011–2012, up from 29% in the previous year (Department of Health, 2012).

Individual management of personal budgets has the potential to fit very well with the Slivers of Time concept; indeed, the person-to-person (P2P) marketplace model set up with, and on behalf of, Council 2 with CareCo shows evidence of this. Council 2's P2P marketplace model has been implemented to meet a wide range of user and purchaser needs, including independence and choice for service users, quality control, vetting standards, expansion of an 'endlessly flexible' social care market, competitive pricing and joint working across London, among other objectives (Department of Health, 2012, pp. 4–5).

A second significant client base is the public sector Job Centre Plus, funded by the Department of Work and Pensions, with a contract to develop Slivers of Time access for welfare claimants. A further client base builds on the corporate social responsibility (CSR) agenda of many private companies that seek to provide local employment under planning obligations (Section 106 agreements under the Town and Country Planning Act 1990). This is a legal tool in place since the 1990s that enables local authorities to oblige companies working on major construction developments to contribute to local employment. Examples include contributions towards retail work, construction work, transport jobs and nursery places.

Implementation at two public sector clients

Evidence from our two case study local authorities suggests varying reasons for client use of Slivers of Time (Table 1).

Council 1, the local authority in the north of England, signed up to the system primarily because it provided an efficient way of meeting internal needs for short-term casual workers – for example, meeting fluctuations in demand for care, refuse collection and library workers. A second reason was because it fit in with the 'narrowing the gap' local agenda aligned with inclusion and city regeneration projects. For example, Council 1 estimated that 60,000 unemployed people with barriers to work in more typical working arrangements could find work through the platform, enabling those with limited health, caring responsibilities and so forth to work as and when they could.

In 2007, the Council 1 initially provided strong strategic support (from senior management) for the rollout of Slivers of Time software across multiple departments. Prior to its implementation, the general practice for finding cover (sickness absence, holiday cover) appears to have been through an internal list compiled by the council of workers willing to take on additional hours on a casual basis. One operations manager interviewed described this method as a time-consuming process and therefore inefficient. In its first year, 2007–2008, Council 1 signed up 75 sellers of work time and purchased 3,000 hours of work through Slivers of Time, though this is a relatively small proportion of the total task portfolio given that the council employed 20,000 employees at this time (Council 1 documentation). Subsequently, use expanded but was recently cut to just one department – that is, library services, the subject of our case study – because of apparent recruitment problems for other types of work.

At Council 2, council managers were initially interested in how Slivers of Time could enable the scheduling of people to assess personal budgets of carers in the home environments of individual users. However, this pilot project failed for reasons unknown to the researchers. A second project involves the use of Slivers of Time to provide a pool of casual labour to meet a wide range of basic personal service needs, financed and managed by individual users through personal budgets and own financing. In this initiative, the council uses Slivers of Time as a tool to assist sellers/care workers and buyers/end users in the process of managing their care needs. While there have been significant budget cuts and reduction in staffing in both cases, there has been no clear effect on the purchased number of hours; any reduction in use is for other reasons, as in the case of Council 1. Short-term casual work, at least in these cases, appears to be protected from the negative effects of UK public sector cuts.

At the time of data collection (April 2014), 47 sellers were registered through Slivers of Time in the Council 2 pool of workers. We have no recent data for Council 1. Registered sellers in the two cases include existing employees of the council, students, retired people, carers and people on benefits (JobSeekers' Allowance and Incapacity Benefit). The sellers also include people with conditions such as dyslexia and chronic fatigue syndrome. Therefore, all of them have some other main activity or reason for not being in standard paid employment.

Council 1 works with a local temporary recruitment agency, which helps individuals to connect to the internet platform. The agency provides the main regular point of contact with operational managers at the council's libraries seeking cover. The agency assists the council in recruiting potential sellers as part of its fee. It checks identification, requests references from former employers and introduces each person to the workings of the Slivers of Time online platform. The latter involves training in the use of the calendar, workplace selection and managing text communication. Council 2 approached a voluntary organisation, CareCo, and requested it to work with Slivers of Time. As such, CareCo is responsible for the operationalisation of the online software scheduling tool and all communications with Slivers of Time managers.

For the purposes of UK employment law, there are three distinctions that are relevant here. According to UK government guidelines on employment, an 'employee' is defined as someone who has a contract of employment that states the number of hours they are required to work and obliged to carry out (UK government, undated). Employees are entitled to the full range of UK employment rights, including redundancy pay, right to flexible working, minimum notice if their employment is ending and so forth. A 'worker', however, is often someone who works on a casual basis and to whom the employer is not obliged to give work nor are they obliged to take it. They have fewer employment rights and are not protected from unfair dismissal; they have no right to flexible working, redundancy pay or any notice if their employment is ending. A 'self-employed worker' is in effect their own boss and they have little, if any, employment rights. They also have to manage their own tax and national insurance payments

Use of a formally certified agency in Council 1 constitutes a key difference between the two cases. Registered sellers are always treated as 'workers' in Council 1. However, in Council 2, managers presented a mixed range of status types among sellers – including 'self-employed' individuals and a small number of 'employees' of CareCo. The latter struggled to recruit sufficient people with self-employed status to sign up to Slivers of Time and therefore applied for certification to become a domiciliary care provider (in line with Care Quality Commission regulations). Thus, while CareCo hires these people as employees, for legal purposes they are on zero hours contracts and there is no legal obligation to offer them work. The worker we interviewed heard about Slivers of Time through a friend and had used the platform for around 12 months.

Table 1: Key details of Slivers of Time at two case study clients

	Council 1	Council 2
Date of Slivers of Time launch	2007	2012
Motivation for using Slivers of Time	Need to upgrade ad hoc system for finding cover in a wide range of services within their role as an employer	Need to provide a flexible schedule of casual labour pool to service end user/buyer
Alternative platforms considered or in use?	No	No
Key organisational partners	TempAgencyCo for library service positions	CareCo (voluntary organisation)
Job tasks covered	Care work, library work (customer facing), refuse	Services covered by personal budget plans:

	collection	personal care, gardening, hairdressing, cleaning, driving, shopping support, dog-walking, well-being therapy
Changes in use	Initial expansion but then reduced use to libraries division because of recruitment issues for other job tasks	Learned lessons from a previous failed attempt to develop a pilot initiative for home visits to assess carers
Status of registered sellers	Workers	Employees or self-employed individuals

Source: Authors' overview

Working method, processes and procedures

The role of Slivers of Time is to design and implement a software package tailored to the needs of the client, which may change over time. For example, a supermarket chain will have different job types to a care organisation, but the system may need adapting over time if the supermarket opens new store locations that need to be incorporated into the system. Slivers of Time does offer some additional services such as payroll systems, but its main objective is to provide technology solutions rather than people management advice or information. In many cases, a temporary work agency takes on the role as the legal employer of workers as well as the HR function, so they will recruit, build and maintain the talent pool, train workers to use the system, handle grievance and disciplinary procedures, look after pay and so forth.

The system is seller driven, meaning that it is necessary to first create a pool of workers willing to take on short-term casual work through the system. For the smooth operation of the system, it is vital that sellers keep their work availability up to date via an online calendar system if they are to be 'matched' with potential buyers. Once the seller pool has been set up, buyers (library managers and care service recipients) can use the system to purchase short-term hours of work. They are matched according to four characteristics:

- 'what' is the specific job role (such as checkout work);
- 'when' (date and time) do they want to purchase the seller's services to carry out the work;
- 'where' is the location they want the work to take place;
- 'who' are the casual workers who meet the criteria.

The buyer can then choose from this pool of suitable workers on the basis of their profile, which may include their name, picture, whether they have been booked before, their rate of pay, when they joined the system and their interest in long-term positions (see also the Slivers of Time 'buyer' video, <http://www.sliversoftime.com/technology/videos/>). Slivers of Time does offer a payroll function, although this is an additional service and it is often the agency that takes on the responsibility for payroll and invoicing of the client for seller services directly. At Council 1, the agency invoices the council directly; this covers the pay for the seller as well as other costs such as the Slivers of Time licensing fee. At Council 2, the process is the same except for self-employed workers, whose pay is managed directly by the worker and whose rate incorporates additional costs such as tax, national insurance and the Slivers of Time licensing fee (a percentage mark-up on the rate of pay).

The seller has some control over their working conditions because they can amend their profile in terms of their preferred job tasks, locations of work (in terms of the distance they are willing to travel) and the hours they work through the online calendar system. In cases where the worker has a self-employed status, they may choose their rate of pay, although the extent is limited because going above the market rate potentially makes them a less attractive option on the platform marketplace. The specific tasks are dictated by the buyer, albeit within the scope of the assignment bought on the system. For example, a library manager may purchase an assistant's services for four hours but may

decide to have them reshelve books for half their time and to process loans and returns for the other half. Clearly, there is scope for informal supervision from the buyer. However, there is more formal provision for performance management on the platform, which allows buyers the option to review sellers by giving feedback in a similar way to eBay (this is visible to other buyers within the particular talent pool). Buyers may also store 'favourites', so they can make repeat bookings should they be matched on the system again.

There was some evidence of client integration such as the induction days and training at Council 1 and Council 2, respectively. This was confirmed by the Slivers of Time worker, who said she felt she was treated 'just the same' by her colleagues working directly for the council. However, this integration did not extend to fringe benefits in either case and the workers were not formally included in council employee involvement and communication mechanisms. While self-employed workers at Council 2 have no social protection, those employed in both cases as 'workers' have some social protection in the form of National Minimum Wage legislation, statutory minimum level of paid holidays, statutory minimum length of rest breaks, the right not to work more than 48 hours a week or to opt out of this right if they choose, protection against unlawful discrimination, protection for whistleblowing, and the right not be treated less favourably if they work part time.

The business practice of Slivers of Time has evolved considerably over time in response to various client challenges. The manager we interviewed said there were no legal impediments in the UK. For example, there are no rules in collective agreements for the client sectors in which it operates concerning the use of workers through crowdsourcing platforms, and there are no legal rules about pricing, minimum deadlines and so on that affect this new sector.

One key learning goal has been the need to build in greater client responsiveness to provide (and sell) individually tailored client business solutions. Senior managers recognise that some clients require an IT function that enables part-regular and part-flexible task schedules to enable them to focus on filling more unpredictable demands. A second learning goal has been the need to establish a more robust system for vetting, tracking and registering individual applicants wishing to sell labour time. For instance, there is now an online verification system that checks the individual's social website presence, checks details against criminal records (using the government's Disclosures and Barring Service, which checks for prior convictions, cautions and reprimands), driving licence and credit rating as necessary. A third development has been to design apps that make the service more accessible on mobile devices.

Given the mix of IT skills and recruitment agency skills among the eight-person team at Slivers of Time, it is able to respond to these challenges relatively well. One lead manager has several years of experience with a recruitment agency; another has a background in IT services. Expansion of the client base is said to have evolved fluidly, building on pilot projects won with different government departments and through word-of-mouth among existing client organisations. While we were unable to access detailed data on fees charged to clients, or the formula for fees, we were able to access a report based on preparatory Slivers of Time work for the social care sector, which is relevant to Council 2. The report proposed a one-off, set-up fee to individual local authorities of GBP 30,000 (€36,585) (an exchange rate of €1 = GBP 0.82 is used in this report) and a monthly licence fee of GBP 5,000 (€6,098). In addition, a 2.5–5% mark-up is charged for each hour of work purchased and text messaging charges through the software are additional.

For many clients, Slivers of Time collaborates with partner temporary work agencies through a technology licence agreement. Each agency has a direct relationship with the client and agrees to enable users to access the live booking platform. Many client organisations that use Slivers of Time therefore tend to relate primarily to a local agency rather than directly with the software company.

Both case study clients played an active role in recruiting and training potential casual workers before their registration with Slivers of Time. Sometimes, they worked in partnership with a local recruitment agency, as in the case of Council 1, which helped to train new recruits on library IT systems and internal processes. At Council 2, training was more about meeting the local authority criteria, such as the protection of children, health and safety and data protection. Client organisations encouraged incumbent staff to register to work additional hours through the platform, alongside their standard employment with the council. They also reached out to former employees who had retired

and were interested in casual paid employment. All overtime hours go through Slivers of Time to make the scheduling process more efficient. The advantage of both these groups is their ready-made skills and experience, unlike new registered sellers. At Council 1, the temporary work agency regularly recruited new people to join the pool. At Council 2, the voluntary carers' centre organisation assumed full responsibility for recruiting the initial pool of sellers to the online platform – this was described as an 'intense' programme of work.

Council 1 offered regular induction training sessions every three months to new cohorts of casual staff recruited by the partner agency. One session, for example, involved 10 new potential casual workers who would attend a library for a half-day training session on library tasks and a further half-day session shadowing a member of staff. There are good reasons for the client to assume full control over induction. Library managers were concerned about the council's interface with customers, issues of data protection, and developing awareness of library management and information systems so that services would be delivered smoothly.

Outcomes and effects

Overall, there is no evidence to suggest that Slivers of Time crowds out other forms of employment. At Council 1, for example, Slivers of Time has not replaced permanent positions and its initiatives have always been carried out on a casual and short-term basis. Council 1 argues that Slivers of Time opens up these short-term numbers of hours to a wider pool of workers, including those who may have barriers to standard employment, and, in this sense, is socially responsible.

Slivers of Time managers (and associated documentation) identified a number of potential positive effects for sellers, client organisations and individual service users of the internet marketplace (Figure 1). These issues have been described in full elsewhere (Green et al, 2013; Slivers of Time, 2009, 2011). Here we focus on the operational realities of managing employment as experienced at the two case study client organisations.

Figure 1: Potential positive outcomes for sellers, client organisations and individual users



Source: adapted from information in Slivers of Time documents (SoT 2009, 2011).

Managing fragmented time

The online calendar and crowdsourcing model enables clients to fill a whole range of time slots, from 10 to 15 minutes to full-day shifts, with no obligation to offer standard or regular hours. From the narrow client perspective, it provides a perfect matching of work done with time covered. Units of cover required can be very small. A library in the Council 1 locality may require cover for two hours on a Sunday afternoon, for example. Services provided in the Council 2 case can be as little as 15 minutes, although we were told that individual users are encouraged not to purchase less than 30 minutes.

However, it could be argued that this system complicates the management of time from the perspective of the client organisation. Instead of a small number of regular staff providing regular part-time hours, weekend work or overtime hours, it opens up the possibility of hundreds of casual sellers working for Slivers of Time. Hours worked and pay charged need to be checked and verified by the client (or partner organisation acting on their behalf) and this adds up to significant management costs.

At Council 1, the partner agency assumed these responsibilities. In the week preceding our interview, 78 sellers had delivered multiple chunks of time at various libraries around the locality. Each seller submits their 'self-approved timesheet', which is then input into the agency's IT/payroll system.

Improved choice

Both cases provided some evidence suggesting that client users benefited from the ability to exercise some choice over which individual would fill the required time slot for a given task. Library managers at Council 1 suggested that they could easily select 'favourite' individuals to cover tasks and, equally, avoid individuals with a poor performance history. At Council 2, the evidence suggests that individual users benefited from being able to compare different individuals available, read their profile, check their image and talk by phone if necessary before placing the booking; managers described the benefit as 'total choice and control'. Equally, sellers could check the profile of the user, check that they had the skills to match the profiled risk assessments and read accompanying support plans. The ability to

book up to 10 weeks in advance in the Council 2 case provided users (and sellers) with some security in scheduling, although cancellations from either party were allowed.

Effects for workers

Improved employment access

Both case studies highlighted the improved potential for people ordinarily excluded from the mainstream labour market to access work. While neither case study was willing to provide detailed data on registered sellers, the impression was that sellers comprised a mix of young students, retired people, people with disabilities and benefit claimants seeking work up to 16 hours a week (to fit with JobSeekers' Allowance eligibility rules). For example, at Council 1, the library worker interviewed said that she did not 'really want to be committed to anything' because of other commitments since retirement.

Competing for insecure work

Slivers of Time takes the experience of insecure working time offered by zero hours contracts one stage further by adding a public competition for hours at varying prices (at least for talent pools of self-employed workers). Neither of the interviewed public sector clients provides a guarantee of regular working hours to registered sellers, nor do they give an informal assurance of a certain minimum number of hours. At Council 2, this applied also to employees registered with the software system who were offered a zero hours contract. In both cases, sellers complete an online calendar and the client (or individual user) selects the required task and time required, choosing from a list of available individuals based on a judgement about price, experience and other individual traits. Essentially, it is a type of eBay auction for random 'slivers' of labour time. At Council 1, the worker pointed to the downside of this arrangement, describing a situation just before Christmas where she was offered no hours of work for three weeks and responded to this by taking as much work as she could at other times when she was available. Therefore, there is the potential for work intensity and stress implications for Slivers of Time workers.

Registered sellers are encouraged in both cases to compete for the attention of client organisations and client individuals not only on price, skill and experience, but also on personality. At Council 2, sellers are helped to develop their individual online profile in a way that is attractive to a potential individual user. They are supported in the form of a seller template and CareCo answers queries by email. In addition, the sellers are encouraged to add details of hobbies and other interests that may strike a chord with a potential service user.

Inadequate people management

The platform poses many risks for workers. While the agency manager cited problems with sellers updating their availability on the platform, there is a parallel risk that client managers may accidentally book the wrong person or schedule a task for the wrong time.

At Council 1, some library managers made mistakes. For example, they might double-book sellers for a time slot; both sellers would show up for work but one would have to return home unpaid. The agency manager claimed that she would ensure the person would receive an hour's pay to compensate for travel time, and this was confirmed by the worker who had experienced being double-booked on three occasions during her two-year tenure. Furthermore, tensions might arise across interorganisational relationships if integration is not managed appropriately. For example, council employees might feel that they were bearing the brunt of job tasks as a consequence of poorly trained Slivers of Time workers. However, in both cases, council management felt that these relationships were working well and this was confirmed by the Slivers of Time worker. There may be ways out of casual insecurity. Council 1 library services claimed to have asked Slivers of Time to alert workers who had provided regular cover to apply for a regular part-time position, directly employed by the council. The problem is that there are obvious disincentives to Slivers of Time asking one of its registered sellers to quit the list given that the payment model is based on a fixed share of their contracted time. The agency manager said that there was no example of a seller making the transition

into regular council employment during her three and a half years' tenure. The worker similarly said that there were no examples of these transitions in her two years' tenure.

Strengths and weaknesses

Benefits of a crowdsourcing platform

When it works well, the crowdsourcing platform for casual employment is said to deliver net benefits. It may save administrative time, particularly associated with the time taken to organise temporary cover. Client organisations are, in principle, able to access reliable individuals who have proven to be a reliable source of temporary cover over a period of time. The software platform provides a practical means of matching available schedules with required time slots.

Challenges of working with crowdsourcing

Ongoing difficulties in finding cover at both case study organisations suggest that the online real-time platform is not a panacea (Table 2). It was typically described in interviews as being better than the previous system but far from perfect. At Council 1, the evidence suggests some discrepancy between the impression given by the Slivers of Time sales team about what is possible and the day-to-day reality. The online schedule cannot of course guarantee availability of suitably experienced individuals to cover vacant slots. Therefore, the libraries department still struggled to secure cover for evenings and weekends, which had always been the most difficult periods to cover.

Managers appreciated the potential of the new technology but also recognised that it depended on reliable human input to maximise its effectiveness. In particular, if casual workers failed to update their calendars in response to their changing circumstances (unavailability due to holidays or new caring obligations), this would undermine the performance of Slivers of Time. Managers were often frustrated by having booked a seller who then failed to turn up. At Council 1, where problems of this sort arose, the client organisation manager would contact the partner recruitment agency manager, who would then discuss the issue with the registered seller and remind them of the 24-hour notice rule for unavailability. Moreover, absence of mutual obligation to employment means both sides can walk away from a supposed agreement. Client organisation managers talked about the difficulties of building trust with a seller who did not necessarily understand or empathise with the knock-on effects for the council or individual users of failing to update their calendar or of cancelling 10 minutes before their scheduled slot.

The process of using Slivers of Time at Council 1 involved indirect contact with the software company through the partner recruitment agency. Requests by Council 1 managers for Slivers of Time to update data on the website, such as closure of a library or changing the contact details for a lead manager, appeared to experience a long response lag. On occasion, for example, a manager wrongly registered as the key contact would receive an automatic email from the IT platform that a registered seller could not attend the scheduled time, meaning that the information had not reached the proper person on time. The use of an agency as an intermediate interface seems to be essential given the multiple risks that the online calendar might not function effectively. The Council 1 library manager highlighted the reliance on agency managers to work continuously to find cover, with particular difficulties arising at weekends.

A key problem with the software platform appears to be the potential for non-compliance with the UK's Agency Worker Regulations (introduced in 2011). After 12 weeks in the same job with the same client organisation, UK regulations entitle the seller to the same basic terms and conditions (equal treatment) as if they had been recruited directly by the client organisation. These include pay conditions (basic, holiday, overtime and performance bonuses), working time limits, annual leave, rest breaks and paid leave for antenatal appointments. The agency manager at Council 1 complained that this issue had been discussed for over 12 months with Slivers of Time and that the company had not yet adapted its software. As a result, the agency has had to run separate checks with each seller of labour to ensure compliance with legislation, a situation that it describes as 'ridiculous'. While seemingly innovative, Slivers of Time was in fact perceived by one agency manager interviewed as outdated and unsophisticated compared with newer recruitment IT systems.

Table 2: Potential problems with processes in use of crowdsourcing platform

Issue	Potential problems
Availability of suitable cover	No guarantee of available cover – weekend and evening slots especially difficult
Reliable input from sellers of labour time	Failure of registered sellers to update calendars resulting in misleading availability data
Client control over platform content	Interorganisational chain of communication generates delays in updating platform content (for example, information about library closures and contact changes)
Compliance with employment regulations (where applicable)	Lag in developing a software code to recognise agency worker regulations (for example, more than 12 weeks' regular placement entitles sellers to enhanced pay and conditions) (ACAS, 2014)

Source: Authors' overview

Challenges for HR practices

While the crowdsourcing platform of paid and unpaid work may alleviate some staffing issues, it also brings new challenges in several areas (Table 3). The agency manager at Council 1 emphasised that the online platform required a great deal of day-to-day people management to ensure the system could work as anticipated. At Council 1, the worker pointed out the implications of unstable work patterns for her continued learning and development, since it took longer to become fully trained compared with a direct employee of Council 1 with regular working hours. However, she made the counter-argument that library staff were patient and continued to spend time training her in work methods in the booked and paid for task units after the induction.

A major selling point of the IT platforms for client organisations is that it reduces staffing costs. However, this did not appear to be a main driver for Council 1, which argued that staffing costs were not much different to previous working methods (involving an internal list of casual workers willing to take on additional hours). Once add-on costs for Slivers of Time and agency use were included, Council 1 estimated that costs were equivalent to standard overtime costs for incumbent employees. As pointed out earlier, it is possible for clients to license the software directly, although agencies are often used to take on the role of legal employer and other aspects of the associated HR function. The crowdsourcing use was perceived less as a means to reduce cost than as an additional means to source individuals able to provide last-minute cover.

The issue of staff costs relates to what happens with pay. Slivers of Time documentation emphasises that individuals are able to compete for services on the basis of time availability, skill sets and rate of pay. The experiences of the two case studies are varied. At Council 1, sellers do not control rates of pay. Instead, the agency registers all sellers at predetermined rates of pay – that is, at GBP 7.68 (€6.4) per hour (around 22% higher than the national minimum wage) or GBP 8.02 (€6.6) per hour at prison libraries. In contrast, at Council 2, sellers registered as self-employed are encouraged to specify their own individual rate of pay, although each is advised about the going rate in the local labour market for a particular task, with an informal recommendation not to exceed it. For certain tasks, sellers specify additional charges (for example, for driving, additions are specified for parking, petrol and so forth). CareCo employees on the Slivers of Time system do not enjoy any freedom to charge individual rates and are all paid the national minimum wage.

The need to manage performance problems with appropriate disciplinary systems is not taken away by the use of Slivers of Time. At Council 2, sellers are subject to a 'three strikes and out' disciplinary system managed by CareCo, with no apparent means of lodging a complaint. Performance problems are reported by individual users and this requires Council 2 and CareCo to establish a robust system for ensuring responsible use.

Table 3: Challenges for HR practices in use of Slivers of Time (case study evidence)

HR practice	Challenges for client organisations
Recruiting a list of sellers	Client organisations (and agency partners) expend resources on advertising and promoting the platform to potential sellers, including efforts to attract other client organisations to buy through the crowdsourcing platform
Accessing experienced and skilled labour	Incumbent staff are encouraged to register with the platform for overtime hours, including some retired former employees interested in casual hours
Induction training	Client organisations provide additional training sessions to cater for new cohorts of sellers wishing to register with the platform
Pay and staffing costs	Costs payable to Slivers of Time plus agency use means costs may be equivalent to standard overtime use
Disciplinary issues	Ad hoc disciplinary measures may need to be used to penalise poor performance
Rewarding time	Sellers' self-documented time use may need to be double-checked with client documentation

Source: Authors' overview

Future plans

At Slivers of Time, senior managers aim to continue the recent steady expansion of the company by seeking out new clients and expanding the range of client sectors. In particular, the company aims to target more private sector businesses by building on its successful (and highly visible) contract with the supermarket chain Tesco.

Council 1, the northern local authority, had recently reduced its use of the crowdsourcing platform following difficulties with rolling it out across other departments because of undisclosed recruitment issues. Managers in the library department expect continued use of the platform and the temporary work agency is optimistic that recent difficulties with upgrading the software code to meet labour regulations for agency workers will be rectified.

Council 2, located in the south of England, is using Slivers of Time for one small segment of labour use – that is, care and associated personal services organised through its partner voluntary care organisation CareCo. This practice, together with its partnership with CareCo, is expected to continue.

Commentary

This report explores the merits and risks of innovative crowdsourcing platforms through the lens of one particular company, Slivers of Time. It is by no means representative of all such online platforms, nor, given the small scale of research underpinning this report, does it purport to offer a comprehensive analysis of the experience of client organisations and individuals. Nevertheless, the case study raises several issues of interest for our wider understanding of new forms of casual employment in the UK (and possibly other countries too), with implications for workers' rights. Freedom of choice for workers refers to the individual capacity to set potential times for work availability and to opt in and out of any job/task offered; it in no way ensures the freedom to secure work at a desirable time. Freedom to decide one's status on the online platform presumes that the individual can exercise choice over the rate of pay for a specific bundle of skills. However, our evidence from the two case studies suggests that this does not occur in practice and that would-be sellers of labour are encouraged to offer low rates in accordance with observed market rates for the particular job, regardless of the individual's skill or experience. New welfare reforms announced in

2010 are also said to fit with the principles of Slivers of Time – namely, that unemployed people claiming welfare will be obliged to accept whatever hours of work they can and have their benefits tapered in response. As with zero hours contracts, such a scenario is unlikely to be practical, given the difficulties of tracking and verifying changes in working hours from one week, or month, to the next to calculate due benefits. Yet, in 2010, welfare ministers announced plans to change benefit rules to enable claimants to work as little as two hours a week and specifically endorsed the Slivers of Time platform. Further research is needed to explore a wider range of worker experiences and to analyse the potential for workers to meet the goal of greater stability and regularity of income from paid employment where so desired.

Information sources

Websites

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