URBAANIA KASVUA VANTAA

UIA URBAN INNOVATIVE ACTIONS

EUROPEAN UNION
European Regional Development Fund

The Urban Growth Vantaa project – impact evaluation

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Content

1. Introduction [1]

Technological change, globalization, and aging populations are creating new challenges for Western counties, both at a national and local level. The world of work is changing fast and there are increasing pressure for both firms and employees to adapt. The ability of societies to meet these challenges will be critical for their future success (CEA, 2018; Foresight, 2017).

Occupational restructuring and technological development increase the demand for education and the prospects for low-skilled workforce are particularly alarming. Lack of skilled labour can also hinder the ability of companies to grow. These developments pose a major challenge for the city of Vantaa, which has a high share of low-skill jobs and residents compared to other large cities in Finland. According to Statistics Finland (2020a), in Vantaa 25% of all the 30-39-year-olds had no education beyond compulsory schooling in 2020. The corresponding figure among the whole Finnish population in the same age group was only 15%.

Regardless of the importance of the topic, very little is known about the effective ways to update and improve the skills and education level of the workforce. Educational institutions are typically designed to educate the youth and may be ill-suited for improving the skills of the working-age population. Furthermore, increasing participation rate among those who would likely benefit most from additional education, e.g., individuals with low educational attainment and in jobs with a higher risk of occupational restructuring, has proven to be particularly difficult.

There may also be information frictions that prevent companies from recruiting skilled labour. Furthermore, lack of willingness and competences of companies to invest in digitalization and to new technologies may be pose threat to local growth. These limitations may prevent companies from reaching their full potential and hinder the development of Vantaa region.

The Urban Growth Vantaa project (also known as the GSIP Vantaa project, an acronym for the Growth and Social Investments Pacts) was developed to find innovative ways to boost employment, productivity, and growth in the Vantaa region. The project develops and tests service and incentive models that aim at improving the competitiveness and technological transition of local firms, while simultaneously encouraging social responsibility. To achieve this, the project models aim at i)

[1] We are grateful to Sanni Kiviholma, Lachlan Paterson and Pekka Vanhala for providing outstanding research assistance. We also like to thank our project partners who have worked tirelessly on the project and have provided us feedback and assistance. We are particularly thankful to Laurea and Metropolia for helping with the collection of the survey data.

enhancing recruitment and training of new employees, ii) improving the skills, competences, and education level of employees, and iii) advancing technological change at firm level.

A crucial component of the Urban Growth Vantaa is to increase our understanding of what works. This report presents the results of the impact evaluation of the project that utilizes a randomized control design to provide credible evidence of the impact of the project service and incentive models. This report is an extended version of an earlier midterm report.

1.1 The Urban Growth Vantaa project

The Urban Growth Vantaa project is funded by Urban Innovative Actions (UIA), an Initiative of the European Union designed to provide urban areas with resources to test new solutions that address the challenges they are facing. The project is coordinated by the city of Vantaa, and it is a substantial collaboration with several local agents including Vantaa Vocational College Varia, Metropolia University of Applied Sciences, Laurea University of Applied Sciences, the Bureau for Employment and Business Operations, Helsinki Region Chamber of Commerce, ETLA Economic Research (Etla), and the Labour Institute for Economic Research LABORE (Labore, formerly known as PTLabour), as well as five business partners: Vantti, Finnair Cargo, Solteq, InfoCare, and ISS services. Project partners, Etla and Labore are responsible for the impact evaluation of the project presented in this report.

A central idea of the project is to create and test innovative models that provide incentives and tools for both firms and labour force to adapt to technological change. The focus of the project is on firms with higher shares of routine jobs and on low-skilled individuals. The Urban Growth Vantaa includes three distinct stages, Growth pacts 1-3, which each provide service and incentive models that focus on different targets: 1) recruiting and educating new employees, 2) updating skills and competences of employees, and 3) digitalization and adoption of new technologies. Each growth pact stage begins with developing and testing new service and incentive models. Next, these models are offered to companies in the treatment group. Finally, the data and experiences are evaluated and used to improve the developed models as well as in designing services and incentives for the next growth pact.

To enable long-term effects, the Urban Growth Vantaa includes an automation stage and an impact evaluation. The aim of the automation stage is to encourage further utilization of the developed models in a broader setting after the project ends. The impact evaluation presented in this report,

assesses the effect of the developed service and incentive models with respect to their targets. Careful evaluation of the impact of the explored solutions is necessary for developing effective ways to assist local firms and the labour market to meet the challenges of the future of work. Moreover, the evaluation provides important information for designing development projects in the future.

The project period started in January 2019 and continued until the end of October 2021. Some activities, mainly the automation stage and impact evaluation, have been extended until the end of July 2022.

The project targets firms that have 10 to 200 employees located in the city of Vantaa. The numerical targets for the project are as follows:

1) At least 60 local companies and 350 individuals will participate in the project services (20 firms in each growth pact).
2) 200 new jobs for unemployed persons will be generated by creating and piloting the models.
3) 30 apprenticeships will be created as a result of the project services and incentives

In addition, there are several indicators created to evaluate the effects of the project. These indicators attempt to provide a comprehensive view on the impact of the project on the future prospect of the city of Vantaa.

1.2 The impact evaluation

The Urban Growth project is making a substantial effort to measure and evaluate the impact of the project. Firstly, all partners take part in collecting and assessing the data on the quality and success of the service and incentive models. Moreover, all stages and activities of the project are analysed critically by an outside consultant. Finally, two project partners, Etla and Labore, evaluate the effects of the models using experimental design that provides credible causal evidence.

This report focuses solely on the impact evaluation carried out by Etla and Labore. This impact evaluation differs from the other evaluation activities of the project in that it utilizes a randomized control design to overcome potential issues present if the participants were chosen merely based on their willingness to participate.

A common challenge of any impact evaluation is, how to design a project that enables learning from it. How to make sure that treatment is not credited for a normal regional development or results are not inflated by selection? For example, it is very common that the most motivated and better performing firms and individuals participate in available services. Hence, better results of the treated agents may be merely due to this positive selection. In this project, we attempt to overcome these challenges by comparing program participants to a randomly assigned control group.

In practice, companies are randomly divided into two groups: the treatment and control groups. Only the companies in the treatment group are offered the service and incentive models. Due to the randomization, treatment and control groups are on average similar, and thus, comparing the changes in the mean outcomes of the groups, provides reliable information on how well the developed models work. Both extensive administrative data and multi-round survey data and are used in the analysis.

1.3 COVID-19 and challenges of the impact evaluation

In Finland, the first cases of COVID-19 were reported in January 2020. The situation got substantially worse in March 2020, when community spread of the virus started within the country. At the same time, the government took significant measures to contain and mitigate the epidemic, such as declaring a state of emergency for the country in March 2020 and then again, in March 2021.

The COVID-19 pandemic, which lasted more than a half of the project period, imposed several restrictions on businesses and labour force, and launched a major economic crisis. This also had an impact on the project activities and its results.

Firstly, the economic recession and the exceptional challenges of doing business, forced the partners to rethink of the project goals. Instead of aiming to create 200 new jobs, it might make more sense to attempt to save as many, for example. The benefit of the research design is that the companies in both the control and treatment group were symmetrically exposed to the crisis, and thus, the design allows us to evaluate the ability of the service and incentive models to protect the local firms and employees during a downturn.

Companies may also have lower probability to participate in the models due to the issues caused by COVID-19. Even without a global pandemic, it is a major challenge for this type of project to attract enough participants. The quantitative estimation methods used in the analysis, require a lot of data,

or statistical power, to provide reliable estimates. Hence, it may be more difficult to gain reliable estimates due to the pandemic.

Finally, COVID-19 may affect data availability as the pandemic might significantly decrease the participation rate in the survey, for example via layoffs. In addition, the selection of the types of companies that respond to the survey might be different before and during the pandemic which would create substantial challenges for analysing and interpretating the data.

The project partners attempted to deal with these challenges created by COVID-19 especially by making an extra effort to attract the companies and individuals in the treatment group to take part in the project models. Furthermore, as is natural for a development project, the skills and competences of the project partners have increased during the project, thus enabling better participation results during the latter part of the project despite the pandemic.

1.4 Structure of this report

The rest of the report is organized as follows. Chapter 2 provides an overview of the theoretical and empirical literature on adult education and training. Chapter 3 presents the data sources and defines the outcome indicators. Chapter 4 describes the randomized control trail setup used in the project. Chapters from 5 to 7 evaluate the impact of the Urban Growth Vantaa project by utilising various datasets. Chapter 8 summarises and discusses the results.

2. Literature on adult education and training

Improving and updating the skills of adult population has become an important public policy issue in the recent years. Still, from the point of view of efficient use of public resources, the rationale to invest in adult education and training differs from public investments targeted to young people who have yet to graduate and enter the labour market (e.g., Oosterbeek and Patrinor 2009; Blanden et al. 2012). Both theoretical and empirical literature suggest that investments in youth education does on average result in higher returns to the public sector than investments that are directed towards the adult population.

There are at least three key differences between youths and adults from the point of view of efficient public investment. Firstly, adults are already in the labour market and time spent in education can be away from productive work and thus, education has clear opportunity costs. Secondly, societies have much less time to reap the benefits from adult education when compared to education received at a younger age. Thirdly, public resources targeted at adults, crowd out private investment more likely than those allocated to youth education. For example, firms could replace their own training services with publicly provided alternatives, so that the total amount of training does not increase, but the costs of the education are transferred to the public sector.

In line with these arguments, there are most likely also large differences in the returns to adult education depending on the type of education and the individuals it is targeting. For example, the opportunity costs of adult education depend on the labour market prospects of the labour (e.g., skilled vs. unskilled). Furthermore, the longer the education and training takes, the longer the participants are away from their jobs. Furthermore, some education might not be provided at all in the absence of public provider.

In addition to public sector investments, private firms invest significantly on training their staff. However, the traditional theoretical view states that there are significant inefficiencies related to worker training (Leuven 2005). If the firm has no means to retain employees, the acquired skills can be used by competitor firms, and thus, firms might be reluctant to invest in general training. Poaching firms – firms that hire trained employees from other firms – potentially reap the benefits of training investments (see Moen and Rosén (2004) for discussion). This causes firms to invest less in training than what would otherwise be socially optimal and thus, public sector can subsidize training for firms and individuals to increase human capital accumulation to a more optimal level.

Competing views have augmented the traditional view e.g., by emphasizing the imperfect nature of labour markets that can induce firms to invest in general training (e.g., Acemoglu and Pischke 1998; 1999). Asymmetric information and the related compressed wage structure may motivate firms to invest in general training such as apprenticeship programs, just to retain or attract more able workers (e.g., Mohrenweiser et al. 2020).

Next, we review the empirical literature on adult education and training. The section is divided based on the sector that is providing the education. First, we report findings regarding employer-provided education and training. We explore what type of firms invest in staff training and why, and what are the returns to employer provided education. In Section 2.2, we review the empirical literature on public programs and subsidies targeted at improving the skills and education of *employed* adult age population.

2.1 Employer provided education and training

Employers can offer training for their employees (also called on-the-job training) or encourage employees to enrol in public educational institutions, where the provided education is more general in nature. Empirical studies often strive to document which firms and employees are more likely to invest into time-consuming human capital accumulation, and why, as well as how the firms and employees benefit from these investments. Still, rigorous empirical evidence of the effects of employer-provided training or education is relatively rare, which may be partly explained by the fact that the individual-level information on training participation is not normally registered into public databases which hinders such analyses. Studies differ greatly by the empirical approach employed. Most of the studies are descriptive or identification is based on observables, while experiments or quasi-experiments are only becoming popular more recently.

What type of firms invest in staff training and why?

Earlier empirical literature has demonstrated that the likelihood and features of firm-provided education and training are related to institutional, firm, and individual specific factors (for extensive reviews, see e.g., Bishop 1996; Blundel et al. 1999; Leuven and Oosterbeek 1999; Bartel 2000; Asplund 2005). Bassanini et al. (2005) reviews evidence of workplace training in Europe and finds that large and innovative firms are more likely to provide training possibilities than others. A more recent report by Brunello and Wruuck (2020) provides a country- and firm-level review on the training provision by European firms and finds considerable heterogeneity in the provision of

training. More specifically, training investments are higher in firms in Western and Northern Europe than in other European regions, and firms that have financial constrains invest less in training (see also a companion paper by Brunello et al. 2020).

There is also some evidence describing what type of employees participate in training provided by employers. Brunello (2004) uses European Community Household Panel data on 14 European countries and finds that employees that have higher prior educational attainment are more likely to participate in employer-provided training. The review by Bassanini et al. (2005) reaches the same conclusion. Arulampalam et al. (2004) use the same survey data as in Brunello (2001) and find that differences in participation by gender are not significant on average, but that there are country-specific differences, and that these are mainly explained by other individual-specific factors such as age, sector of work, and the type of work-contract.

Hoffman and Burks (2017) use exogenous variation from the quit penalty policies by a leading trucking firm in the U.S, to show that training contracts that included penalty for quitting, significantly reduce departures after receiving training. This suggest that firms are more likely to sponsor general training if they have ways to constrain individual mobility. Employers may also choose to invest in the general skills of their employees in attempt to attract their high performing employees to stay. Chapelli (2004) focuses on employers' tuition assistance and concludes that employers' financial support for post-secondary education does not suppress the employees' wages, but that employers gain at least part of their investment back by retaining quality employees for longer periods (for more on this topic, see Tuor and Gellner 2010). According to Chapelli (2004), the tuition assistance appears to be economically justifiable from the employer's standpoint if the education results in higher employee productivity.

Recent literature has also stressed behavioural factors, such as reciprocal behaviour, as a potential motivation for why employers invest in training, including general skills. The recent experimental study by Sauermann (2021) explores how training affects worker performance and how this relates to workers' reciprocal attitudes. The experiment assigned call centre workers randomly to a week-long training program in the Netherlands and studied the effects on workers' attitudes and effort. The findings suggest that more reciprocal workers are more likely to participate in training, exercise more effort during the training and perform better after receiving the training. Sauermann (2021) concludes that training is an alternative channel through which the exchange between workers and

firms operates, and that workers' attitudes, in paying back the investment in training through higher performance, could explain why firms invest in human capital.

Effects on employment, wages, and productivity

Literature on the effects of on-the-job training on employment and wages is still relatively scarce albeit growing. Haelermans and Borghans (2012) provide a meta-analysis on wage returns to on-the-job training consisting of 71 different studies. There is large heterogeneity in the returns to different training programs, and many of the individual studies have low power and they suffer from selectivity issues. However, Haelermans and Borghans (2012) conclude that, on average, training programs are profitable up until the age of 55. It should be noted that the wage returns to training become significantly smaller when focusing on studies that try to account for selectivity and publication bias. It is likely that the studies included in the meta-analysis are not able to correct for this selectivity, and thus results are biased upwards (i.e., they provide too good perception of the effects).

More recently, Picchio and van Ours (2013) use data on firm-provided training (vocational courses paid or organized by the firm) in the Netherlands and shows that the training improves employment prospects for older workers. Ruhose et al. (2019) study work-related training in Germany, finding that training results in higher earnings growth as well as in higher civic and social participation.

There is also a sizable literature studying how worker training affects wage growth and productivity at a firm level. Firms can benefit from training if the training increases productivity more than it increases wages. This is a sign of imperfect competition, that could explain why firms invest in human capital accumulation in the first place. Most of these studies use fixed effect approaches with firm level panel data. Conti (2005) finds that training corelates with productivity growth in Italy, but that there is no clear relationship with wage growth. Dearden et al. (2006) find that a one percentage-point increase in the proportion of employees trained is associated with 0.6 % increase in productivity and 0.3 % increase in wages in the UK. Almeida and Carneiro (2009) focus on large firms in Portugal and conclude that formal job training has on average zero net return for all firms, but that the returns to firms that provide training are significant. Konings and Vanormelingen (2015) use panel data on Belgian firms and find that training increases marginal productivity of employees more than wages.

In addition to these studies using panel data methods and observational data, there is some experimental evidence showing that the effects of training may extend beyond the trained employees to co-workers. De Grip and Sauermann (2012) examine a field experiment that was carried out in a telephone company call centre in the Netherlands. They find that trained workers perform better, and they also increase the performance of workers who did not participate in the training. Thus, it is possible that positive externalities from worker training further increase employers' return on investments in training.

2.2. Public programs and subsidies for education and training

In this section, we review the empirical literature on the returns to public programs and subsidies of adult education and training. Firstly, we discuss studies focusing on different public education and training programs. (e.g., job-search guidance, classroom vocational or skill training, on-the-job training, and public or private subsidized employment). Next, we focus on financing schemes for adult education and training, and finally, we report findings from studies on the returns to formal adult education.

Public training programs and active labour market policies

There is an extensive and rapidly developing empirical literature on active labour market policies (ALMPs). These studies focus on how specific publicly funded programs such as job-search guidance, classroom vocational or skill training, on-the-job training, and public or private subsidized employment affect further employment and other outcomes. While this literature focuses mainly on how the public sector can successfully help individuals who are out of work, some of these public programs also target disadvantaged employed individuals, such as members of minorities or low-skilled employees. In the following, we focus on public programs that target (also) *employed* adults (for ALMPs, see Greenberg et al. 2003; Kluve 2010; Forslund et al. 2011; Card, Kluve and Weber 2010, 2018; Crépon and Van den Berg 2016).[2]

There is a long tradition of public employment and training programs in developed countries, especially in the U.S. (see reviews by Lalonde 2003; Greenberg et al. 2003). For example, the Job

[2] To briefly summarize, ALMPs targeted to unemployed individuals are often shown to have negligible effects on employment in the short-term, but impacts become on average more positive in two to three years after the programs. Naturally, different programs have heterogenous effects by timing and participant groups, but overall programs that focus on human capital accumulation (education and training) have been shown to result in the most positive effects on employment over time (as noted also by McConnell et al. (2021).

Corps program in the U.S., offers services such as guidance and vocational training for disadvantaged youth (age 16-24). Schochet et al. (2008) finds that these services increase educational attainment and earnings in the short-term (2 years after the program). A cost-benefit analysis indicates that the program was more beneficial for older cohorts (20- to 24-year-old) than younger ones. However, in a follow-up study, Schochet (2021) finds indications that the program increases employment in 20-to-24-year-old group in the long-term (20 years afterwards), but not for younger cohorts.

The Adult and Dislocated Workers program, a successor program to the Job Corps program, offers "one-stop" office services to adults and dislocated workers. These services include core services (basic counselling, job search and placement services), intensive services (comprehensive assessment, career planning, possibly short courses), and training services with a voucher. Non-experimental evidence by Heinrich et al. (2013) and Andersson et al. (2016) suggest that the adult program significantly increases earnings and employment, while the effects are smaller or not significant for dislocated workers. Heinrich et al. (2013) conclude that the adult program is cost effective even if there is a positive effect only for three to four years.

In the United Kingdom, the Train to Gain program targeted low-skilled workers and expanded in the period of 2002-2006 to cover around one third of the British workforce. The program strived to increase employer-provided and qualification-based training, by offering free training opportunities, related vocational guidance, and direct monetary support for workers as well as compensation to employers. Abramovsky et al. (2011) find that the program did not increase take-up of training in the first three years, but instead suggest a high level of deadweight (i.e., outcomes that are not additional to what would have been achieved without the program).

Katz et al. (2020) provide a detailed and up-to-date analysis of four randomized evaluations of sectoral employment programs in the U.S. Sectoral employment programs normally target disadvantaged workers that have no college degree. The idea of the programs is to create a strong employee-employer relationship and enable demand-based occupational training, so that previously low-skilled employees can move up to high-quality employment in specific industries such as health care and information technology.

Katz et al. (2020) summarize his findings by stating that the sectoral employment programs show significant and persistent earnings effects that are not the result of improvements in employment probability, but that programs succeed to move participants to jobs with higher hourly wages. The

programs assess the needs of local employers, who are then involved in the design of the training. Further mechanism analysis suggests that the occupational and soft skill training provided by the programs are important explanations for successful career progression.

Vouchers and other finance schemes for adult education and training

Vouchers and other finance schemes for adult education and training are popular policy tools to incentivize individuals and firms to invest in training and education (see e.g., Barnow (2009) for the U.S. and Hipp and Warner (2008) for Germany). Still, as Tomini et al. (2016) conclude in their systematic review, the evidence of effectiveness of training vouchers on employment and earnings is mixed. This conclusion similarly applies to other financing schemes.

Görlitz (2010) evaluates a training voucher program that was implemented in the German federal state Nort Rhine-Westphalia between 2006 and 2007 (the so-called Bildungsprämie voucher program). The voucher reduced training costs by 50% per course with a maximum of 750 euro per voucher, and the number of vouchers was not limited per employee or establishment (although only one could be used per course). The voucher was available for firms and their employees with less than 250 employees. In addition, the program was restricted to those who had not undertaken training in the previous year.

Görlitz (2010) finds that the voucher increased the share of firms that invest in training (10-15 %), especially among medium-sized firms and those with a large share of employees with vocational qualifications (extensive margin). There is no evidence that the voucher increased the amount of training of participating firm (intensive margin) or that there were improvements in the educational structure of establishments (the fraction of participants without vocational degree). A follow up study by Görlitz et al. (2016), finds that while the voucher has no earnings or employment effects it increases the likelihood of performing non-routine work tasks.

Schwerdt (2012) evaluates a large-scale experiment in Switzerland, where adults aged 20 to 60 years, where provided vouchers of the value of 200, 750 or 1500 Swiss francs. These vouchers were intended to promote lifelong learning and they could be used for any type of adult education without restrictions. The study finds no significant effect on earnings or employment and that those individuals who are already more educated are more likely to participate in training activities. Schwerdt (2012) concludes that targeted vouchers, specially to individuals with lower levels of educational attainment, could be more beneficial than non-targeted voucher programs.

Hidalgo et al. (2014) evaluates a randomized experiment in which training vouchers of 1,000 euros were given to low-skilled workers in four different sectors in the Netherlands. Voucher recipients could use vouchers for courses or training sessions of their choice during a two-year period. The only restriction was that the training should be relevant for workers labour market position. While the study finds that vouchers increased participation in education, the voucher program has no effect on earnings or job mobility. Hidalgo et al. (2014) also estimate that the program has a high deadweight (60 %), indicating that public vouchers crowd out private investments in training.

Dauth and Toomet (2016) study the effects of job-training subsidies that were targeted to employed workers over 45 years of age in Germany. The subsidy covered both training costs and employer wage costs up to 100 %. Employees and employers could apply for the subsidy, and both parties needed to agree to the training. Dauth and Toomet (2016) find that training is related to higher job stability and employment, suggesting that training may increase labour market attachment of part-time and older workers. Dauth (2020) finds similar positive employment and earnings effects, but in contrast to the earlier study, the effects are larger for younger cohorts.

Görlitz et al. (2017) further examine the possibility of increasing the voucher take-up rate and participation in training by offering information to the eligible employees by phone. The randomized information experiment was conducted in two waves, and it offered information about the voucher and how to apply for it. While the experiment shows that the information intervention had a positive impact on knowledge about the vouchers, it did not affect voucher take-up and training participation. These results suggest that pure informational limitations cannot explain low participation in training activities.

Van den Berge et al. (2017) evaluate how tax incentive for lifelong learning affect the take-up rate of learning expenditures in Netherlands. Those who pay income taxes could deduct 500 to 15,000 euros of educational expenditures (fees, books, etc.) from their earnings. Results from regression kink design suggest that high-income groups increased learning expenditures by 10 percent, but the effect is zero elsewhere. The study also suggests that the deadweight loss from tax deductions is high, as is the case for non-targeted voucher-based systems.

Kauhanen (2018) evaluates the effects of an education leave program (also called a training-leave program) that enables employees to receive subsidies for education for up to 18 months, in Finland. According to the Finnish law, employees can take a study leave and return to the workplace after

undertaking education without impacting previously agreed work contracts. Kauhanen (2018) finds that the subsidy increases the level of education by ten percentage-points and the likelihood of changing occupation by nine percentage-points over the three-year follow-up period. The study finds significant and large negative earnings and employment effects in the short-term, but the estimated effects are close to zero four years after beginning in the program. The study's conclusion recommends more targeted subsidies as participants are relatively highly educated.

Public financing schemes can also be used to target employees who are already enrolled to some educational institution. The rational is that disadvantaged groups may need additional support to graduate. Gurantz (2019) evaluates how tuition vouchers and cash payments affect non-traditional students' outcomes in different type of colleges in California. Results suggest that aid does not affect attendance, degree completion, employment, or earnings.

Fleuren et al. (2020) perform a field experiment within a Dutch insurance company to test four different voucher packages and find that the design of the package can have a substantial effect on take-up rate and further training participation. Their results show that a flexible voucher, where employee can choose the training within the organization or to pay an outside organization has the highest take-up rate.

Finally, Polidano et al. (2021) study how vouchers that expand public supply of vocational education and training (VET) according to demand, affect participation and skill mismatch in Australia. Demand-driven vouchers, which relax funding caps on publicly-funded VET courses, result in higher participation and higher enrolment in education in fields with labour market skill shortages.

Adults in formal education

Besides via specifically targeted programs or financial schemes, public sector funds adult education by subsidising formal education institutions. Some of the educational institutions are more relevant for adult population than others. In the U.S., community colleges (see Belfield and Bailey 2017 for review) and technology centres are two possible avenues for adults to upgrade their skills, depending on the state and possible eligibility criteria. Research suggests that public community colleges (Jepsen et al. 2014; Stevens et al. 2019) and technology centres that do not provide degrees (Carruthers & Sanford (2018), can have a significant positive effect on later earnings. Still, there are probably significant differences in the returns to education for adults depending on how the

education is organized. For example, Cellini and Turner (2019) find that for-profit colleges in U.S. result in relatively low returns for students.

Further empirical evidence suggests that public tertiary education can have significant employment and earnings effect for adults (for Sweden see Hällsten 2012; Stenberg and Westerlund 2016; for Finland, see Böckerman et al. 2019). Kauhanen and Virtanen (2021) show that adult education increases earnings and employment both in secondary and higher education, but the effects are the largest for the less educated group (those with only compulsory education).

2.3. Summary of the findings

This section reviews the prior research on adult education and training. The evidence of both employer and publicly provided education suggests that individuals with higher prior educational attainment are more likely to participate in education and training even though this is unlikely the group that would benefit from the additional training the most. Several studies report positive returns to publicly funded adult education and training. However, very few of the include cost-benefit analysis and thus, it is unclear, whether the returns exceed the high costs of training adults. There is much less credible evidence of the effects of employer-provided training due to limitations in data availability.

According to prior research, firms that are large and innovative and that do not experience strict financial constraints invest more in updating the skills and competences of their employees. Empirical findings suggest that firms may be willing to invest in training to attract and retain talented employees, or to elicit higher performance. Furthermore, using quit penalty contracts may lower the risk of employee departures, and thus, encourage employer investments.

3. Data and outcome indicators

The Urban Growth Vantaa project has various and very broadly defined goals, such as improving skills and competences of employees, promoting productivity and digitalization of the companies, and boosting growth in the region. The first critical task of the impact evaluation is to define precise outcome indicators and to determine how to measure them.

There are several challenges in finding relevant measures and data that captures the project targets. One of the main obstacles is the time frame of the impact evaluation. The project period, including creating and testing new ways to advance the local economy in Vantaa, as well as evaluating the effects of the developed solutions, is only a little more than three and half years (including an extension period given for some activities of the project). The most reliable and extensive datasets can take a long time, even years, to be made available for researchers. Thus, it is difficult to find reliable data that capture the potential effects of the project, especially those accomplished at later stages of the project. We utilize several different data sources to balance out the weaknesses and strengths of various data.

Another crucial challenge for the impact evaluation is that companies have long-term strategies for their employment and production choices, and they do not alter these decisions lightly. Achieving changes in these fundamentals is a challenging and long process. Therefore, we also include outcome indicators that attempt to capture early indications of any changes, such as improvements of information or attitudes of companies towards increasing the skills and competences of their employees or adopting new technologies.

3.1 Data sources and sample

The impact evaluation utilizes a randomized control trial methodology. This approach imposes some important requirements for the collected data and subsequent analysis. In particular, it is essential that the data covers companies (and employees) in both the treatment and control groups. Our main data sources are administrative register and survey data (see Info box 1). In addition, we use company databases for contact information.

Administrative data has two important benefits: it covers the whole population of interest, and it is reliable due to a rigorous data collection process. However, the administrative data is often updated only with long time lags, and thus, the data is not available for the most recent years. Furthermore,

there are several important features critical for the firm behaviour and decision making (such as attitudes and information of companies) that are not measured in administrative register data.

We complement the administrative data with data from a multi-round survey. The first survey round (the baseline survey) was conducted in the spring 2019, before the treatment firms were approached and before they were offered any service and incentive models, the last two rounds of the survey took place in October 2020 and 2021. Survey data allows us to measure aspects unavailable in register data and to provide information on the latter part of the project. The greatest challenge with the survey data is to maximize the response rate. The size of the effects generated by the models are unlikely to be very large. This imposes important demands for the data: the data should be representative and attract high participation (see Section 4.2. for discussion).

Info box 1 Data sources

Enterprises and Establishments register of Statistics Finland is an administrative statistical register that covers all enterprises, corporations (inc. public corporations) and private practitioners of trade that are liable to pay value added tax, are employers, or enter into the preliminary tax withholding register. Information for the register is obtained from two main sources: Tax Administration's registers and surveys of Statistics Finland. These data are used to define the target group for the study and to determine various firm level characteristics.

Vainu company database uses machine learning and data processing techniques to collect data on all businesses in any given target market in real time. They use company websites, social media, news outlets, press releases, legal filings, and public registries. These data are used to determine the target group and their contact information.

Individual level administrative registers of Statistics Finland include Degree register, Folk earnings register, and Income register. Information from these registers is used to explore the impact of the service and incentive models on participation in education, employment, and earnings, as well as to measure the characteristics of the employees of the target group.

Financial statement data are used to explore investment choices and performance of companies. Information on investments, turnover, and profits are useful in analysing the effects of project on productivity, competitiveness, and growth of the companies.

Multi-round survey data are collected during the project period. The survey is conducted in three rounds: i) at the beginning of the project (before the initial contact to companies in the treatment group), ii) in the middle of the project (during the Growth pact 2), and iii) at the end of the project. All survey rounds are conducted online and the invitation to participate in the questionnaire is sent via email. In addition, the first round of the survey was sent by mail with a return envelope. The information from survey complements the impact analysis using register data. The survey and the related open-ended questions are attached to this report.

3.2 Analysis sample

The initial sample was collected from the Register of Enterprises and Establishments. At the time of gathering the sample, these data were available until the end of 2017. The project targets companies that have at least one establishment in Vantaa. Moreover, following the project plan, the number of employees in establishments located in Vantaa was restricted to 10-200, and companies in the category of large corporations were excluded.

Finally, we focused on the following industries: Manufacturing; Construction; Wholesale and Retail trade (including Repair of Motor Vehicles and Motorcycles); Transportation and Storage; Accommodation and Food Service Activities; Information and Communication; Real Estate Activities; Professional, Scientific and Technical Activities; Administrative and Support Service Activities; Human Health and Social Work Activities; Arts, Entertainment and Recreation; and Other Service Activities.

The sample included in total 1441 establishments from 1175 companies. We merged these data with Vainu company database from February 2019 to ensure that the target companies were still operating at the beginning of the project period. Furthermore, Vainu database provided the contact details of the companies (mail address, email addresses of the relevant contact persons, etc.).

Due to a high share of inaccurate or missing contact information, a lot of additional effort (internet searches etc.) was made by project partners to improve the quality of the contact information. At the end, we had relatively accurate data on 858 establishments of 802 companies. The first round of the survey was sent to this group of firms/establishments.

The sample was further reduced due to some misinformation detected during the first round of survey (companies had ceased operation, no longer located in Vantaa, etc.). The final sample used in the randomization includes 844 establishments of 792 companies. Half of these, 396 companies (430 establishments), were randomly assigned to the treatment group and the other half, 396 companies (414 establishments), were assigned to the control group.

To define the final sample used in the impact evaluation, we merged the data once more with the Enterprises and Establishments Register in 2018. These data provided the most reliable information available on the target population companies at the beginning of the project. The impact evaluation uses data on 780 companies, of which a half, 390 companies, belong to the treatment group.

3.3 Outcome indicators

The Urban Growth Vantaa has various goals such as to improve education level, create new jobs and to expedite adoption of new technologies in the region. The numerical targets specified in the project application are for the number of participants in the project service and incentive models as well as for the number of new employees and apprenticeships created. In addition, we have defined several outcome indicators that aim at providing a comprehensive overview of the effects of the developed service and incentive models on the areas targeted at the project.

The outcome indicators are divided into the following four categories: participation, information and attitudes, behaviour (choices), and growth (see Info box 2). The first category measures the participation of the treatment companies in the service and incentive models of the project. Furthermore, we utilise register data to examine what type of firms the models managed to attract. The next category includes measures that attempt to capture changes in the trajectories of the firms, i.e., in the prospects for growth, whereas the last two categories include indicators that evaluate how the project affects the actual choices and growth of the companies during the project. The outcome indicators measure the developments in the three areas that the Urban Growth Vantaa project is attempting to impact, namely recruitment and training of new employees, updating skills and education level of their workforce, and digitalization.

Earlier versions of the indicators described in the midterm report of the impact evaluation as well as in the annual reporting to the funding institute used numerical scale for all the categories of evaluation. However, due to the power issues discussed in Section 4.2 as well as to our estimated effects, we have used more course scale (positive effect/positive effect/on effects) in this final impact evaluation.

Info box 2 Outcome indicators

RESULT TITLE	INDICATOR	DESCRIPTION OF INDICATOR AND DATA
Participation	Participation in the Growth pact 1, 2, and 3	Measures the number of participants in each growth pact. Furthermore, the characteristics of the participating firms are compared to those from the treatment group not participating in any treatment. Uses data collected during the project merged with register data.
Information and attitudes	Information and attitudes: recruitment and training of new employees (Growth pact 1)	Measures the effects on information and attitudes regarding recruitment of new employers (views on possibilities and benefits etc.). Uses survey data.
	Information and attitudes: improving skills and education level of employees (Growth pact 2)	Measures the effects on information and attitudes regarding updating skills and competences of the employees (views on possibilities and benefits etc.). Uses survey data.
	Information and attitudes: digitalization (Growth pact 3)	Measures the effects on information and attitudes regarding digitalisation (views on possibilities and benefits etc.). Uses survey data.
Choices	Recruitment and training choices (Growth pact 1)	Measures the effects on recruitment and training of new employees. Uses survey data and register data. Examines also potential and restrictions regarding the topic.
	Improving skills and education level of employees (Growth pact 2)	Measures the effects on updating skills and competences of employees. Uses survey data and register data. Examines also potential and restrictions regarding the topic.
	Digitalization (Growth pact 3)	Measures investments in R&D and digitalization. Uses survey data and the Financial Statement data.
Growth	Employment	Measures the level of employment. The information is collected from the Income Register.
	Turnover	Measures turnover. The information is collected from Financial Statement data.
	Productivity	Measures productivity of the firms based on returns to investment and average salaries. The information is collected from Financial Statement data and the Income Register.

4. Randomized control trial

The project utilizes a randomized control trial (RCT) to overcome many of the challenges typically apparent when analysing the impact of an intervention. A common problem with pilots, which are allocated based on the willingness to participate, is that the most motivated companies and those most aware of the challenges posed by future work e.g., are typically more likely to participate. This can lead to greatly overestimating the impact of an intervention. In this study companies are randomly assigned into two groups: the treatment and control groups. Only the companies in the treatment group are offered any project services (included in the service and incentive models). Due to the randomization, firms and employees in the treatment and control groups are similar on average. The setup takes also into account differences in the characteristics not observed in data, such as motivation and business strategies. Hence, we gain reliable information of the impact of the project models merely by comparing how the mean values of the outcome indicators change in the treatment vs. control groups, i.e., what is the difference (over time) in the difference in the means.[3]

The COVID-19 pandemic has imposed several restrictions on businesses and labour force, and caused a major economic downturn. However, due to randomization strategy, it is reasonable to assume that its effect has been felt equally by the companies in both the treatment and control groups. Thus, although COVID-19 has also had an impact on this project and its results, the chosen empirical strategy allows us to provide credible estimates of the effects of the project even during these peculiar times.

4.1 Randomization

We divide the firms into six clusters based on their main industry (three clusters) and on the number of their employees (splitting all three clusters in half). This is to improve the balance of the data, that is, to assure that we have similar firms in both the treatment and control groups.

Finally, we randomly assign half of the firms in each cluster to the treatment and control groups. The firms in the treatment group (and their employees) are offered the project services, whereas the firms (and their employees) in the control group are not.

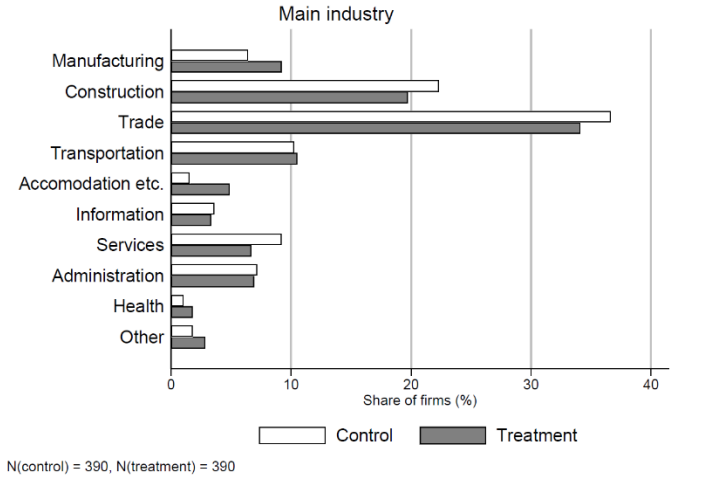
[3] Despite the randomization, the mean values of the outcome indicators between the two groups may be a little different initially due to the small number of target firms. Therefore, we focus in the analysis on the difference in the difference in the mean values instead of merely measuring the differences in the means at the end of the project.

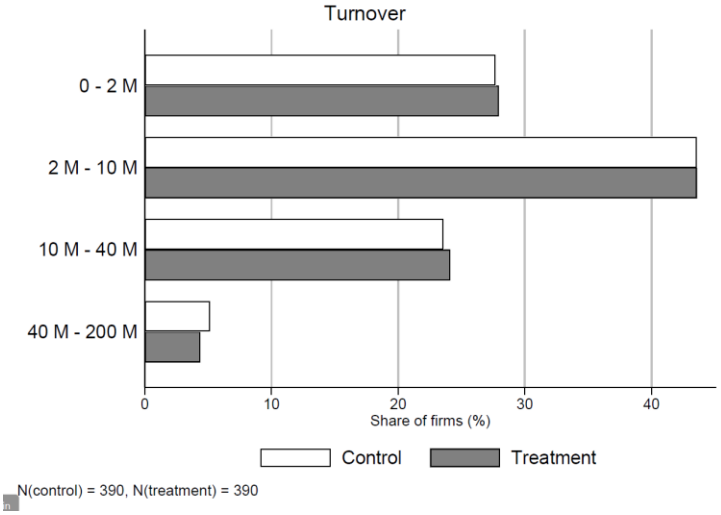
We examine the validity of the design also empirically by analysing the balance of the observable characteristics by treatment status. Ideally, we want the two groups be identical before the companies in the treatment group are offered any treatment. We use our rich administrative data to compare firm and employee characteristics of the two groups in the year 2018. The employee characteristics are measured among the workers that are matched to firms in the treatment and control groups using the FOLK data of Statistics Finland.

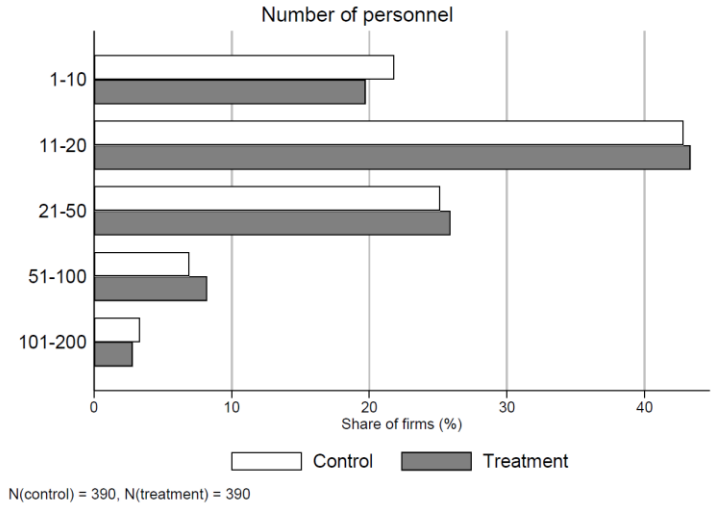
Figure 1 plots the distribution of firm characteristic in the control and treatment group companies. We can see that companies in the two groups are very similar with respect to their main industry, company turnover, and firm size measured by the number of personnel. It should be noted that the firm size measure used in Figure 1 is based on a different dataset than what was used for defining the analysis sample, and that is why a non-neglectable share of the companies can have here fewer than 10 employees. Here we define the number of personnel based on the workers that are matched to their employers using the FOLK data, whereas the sample is defined based on the information from the Register of Enterprises and Establishments.

Figure 2 represents the distribution of employee characteristics in the treatment and control group firms. According to these results, the employees in the two groups are very similar when measured by gender, age, as well by level and field of education. Furthermore, the employees in the treatment and control groups have almost identical levels of prior tenure with their current employer, and they have been equally actively participating in adult education prior to the project period. These graphs provide evidence of a high level of balance between the treatment and control groups. Overall, our analysis implies that randomization has succeeded in dividing the firms into two very similar groups.

Figure 1 Distribution of firm-level characteristics by treatment status

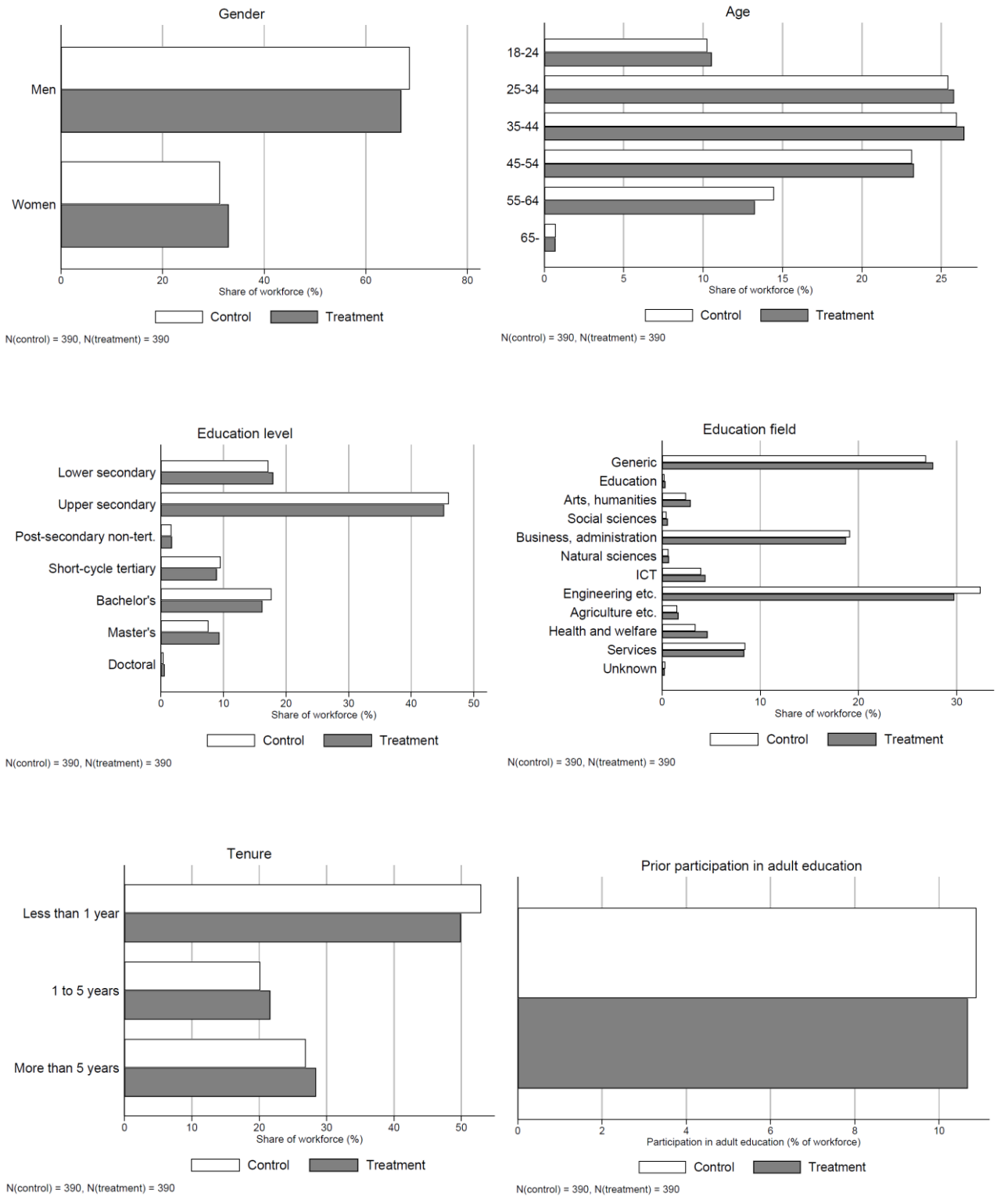






Note. The graphs report the distribution of main industry, turnover, and the number of personnel for the firms in the treatment and control groups.

Figure 2 Distribution of employee characteristics by treatment status



Note. The graphs report the distribution of the employee charateristics of the firms in the treatment and control groups.

4.2 Power Test

While the set target of reaching 60 companies is quite ambitious for this type of development project, it is only a small number when considering the data requirements of quantitative statistical methods. The target of 60 companies equals to a little less than 10 percent of the total number of firms in the target group, and approximately 15 percent when compared to the number of firms in the treatment group. Since the share of the firms actually receiving any treatment is so small, the impact of the project on the participants should be considerable to be visible in the difference of the difference in the means.

A formal power test shows how difficult it is to detect a statistically significant effect in this setting at the firm level. The size of our sample is quite small, 792 firms. The average number of employees in our sample is 25.9 with standard deviation of 25.4. We calculate that with a power of 0.8 and a significance level of 0.05, we can detect an effect size of 0.20 for employment, meaning that average firm level employment in the treatment group would need to increase from 25.4 employees to 31 employees because of the GSIP program. With the same power and significance level, we calculate that we can detect an effect size of 0.10 for the average participation rate.

Thus, the power test shows that it is highly unlikely that the impact evaluation can provide any definitive conclusions about the results of the project. However, that is not to say that the results below would not provide valuable information of the phenomenon and of the project experiences, or suggestive data on the impact evaluation.

Designing a randomized control trial should start with careful planning of the research question and the feasibility of the research. This project is first and foremost a development project and thus, the evaluation is constrained. We include some proposals on how to create pilots which provide better setups to learn the discussion in the discussion in Section 8.

5. Participation in the project

We begin the analysis by examining how many and what type of companies participated in the project services during the project. Without a high participation rate there cannot be an impact that can be measured empirically. The developed services may also be particularly useful for some companies and less so for others. Information on the participation rate and characteristics of the participants are useful for the interpretation and framing of the results of the impact evaluation presented in Sections 6 and 7.

5.1. Participation in the project services

The project had a goal of 60 participating companies in total, and at least 20 companies participating in each Growth Pact 1 to 3. As discussed in Section 4.2. this is not necessarily enough to allow us to identify possible treatment effects. Nevertheless, attracting this many companies in such a short time frame, may still be very challenging.

According to the data collected during the project, these numerical targets were clearly achieved. Each of the growth pacts succeeded in attracting 30 to 42 companies, which equals to 1.5 to 2.2 times the target. Close to 60 percent of those companies that participated in any of the growth pacts, participated in more than one pact. A little less than one fifth of the companies participated in all three growth pacts. The repeated participation is a good signal of the usefulness and quality of the service and incentive models, and it also means that many of the participating companies receive more intensive treatment compared to a situation where all companies would have participated only in one growth pact. Total of 65 companies participated in at least one growth pact, surpassing the goal by 8 percent.

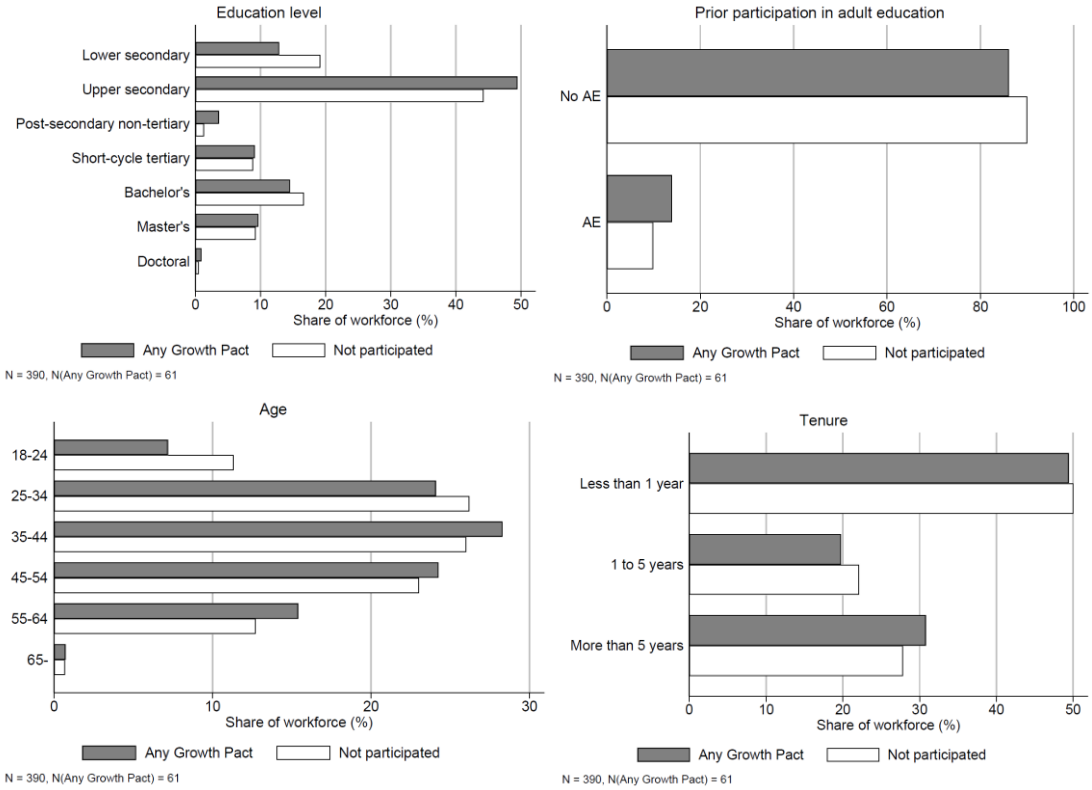
5.2. Characteristics of the participants

The Urban Growth Vantaa project aims at promoting growth in the region, especially by increasing productivity. To this end, the models developed in the project pursue facilitating recruiting new employees, improving the skills of labour force, and increasing adaption of new technologies. To gain a better understanding whether these goals can be achieved, it is useful to examine the type of companies participating in the project. We use register data to characterize the participating companies compared to the companies in the treatment group that did not take part in any of the services.

A major concern motivating the project has certainly been the high share of low-skill jobs in Vantaa. As discussed in Section 2, it is also one of the main challenges highlighted in the prior research to encourage those with low education level to participate in adult education and training, although these are the groups typically shown to benefit the most from the participation. Against this background, it is particularly interesting to examine the education level of those participating in the project.

Figure 3 compares the companies in the treatment group by their participation status. The main difference in the education level of the employees in the companies participating in the project vs. those not taking part, is that they have more often at least an upper secondary degree. Moreover, we can see that the employees of the participating companies have participated a little more in adult education also prior to the Urban Growth Vantaa project.

Figure 3 Distribution of the characteristics by participation status (any vs. no participation)



Note. The graphs show the distribution of the employee characteristics separately for the firms that either participate in any of the project models or do not participate in any of the services.

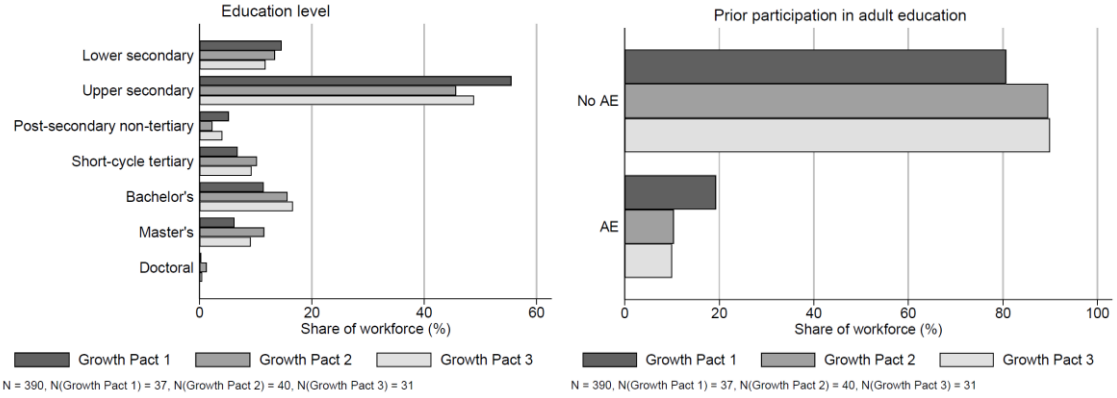
These results imply that the project services did not manage to reach the companies that had the least educated employees or those whose employees were less likely to use other education and training alternatives. Unfortunately, our data does not enable a characterization of the employees

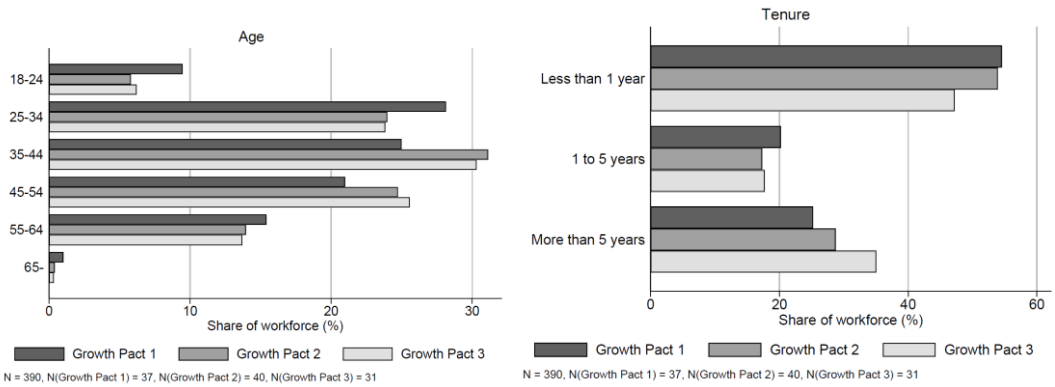
who actually participated in the services. It could well be that although, the participating companies did not have particularly low educated employees, the project still managed to attract their employees that had less education.

Figure 3 also shows that the project managed to attract companies that had on average older employees when compared to those who did not participate. The employees of the participating companies were also likely to have at least 5 years of tenure at the firm. We find no difference in the average gender shared of the companies by participation status.

As described earlier, each of the growth pact target a different topic, and thus, we may expect there to be also a differential distribution of characteristics of the participating companies depending on the growth pact. Figure 4 provides information on the firm characteristics conditional on the growth pact that the company participated in. The graphs show that the participating companies in Growth Pact 2 and 3 were quite similar but that Growth Pact 1 attracted companies that had more educated employees, who had participated in adult education more prior to the project, and who were older and with more tenure than the employees in the companies participating in Growth Pact 2 and 3. It is very likely that the project partners learned a lot during the project about how to approach and attract the companies. This could explain, how Growth Pact 1 attracted more companies that were more active already before the project, but Growth Pact 2 and 3 which took place later, managed to attract also more passive companies.

Figure 4 Distribution of the characteristics by participation in growth pacts one to three



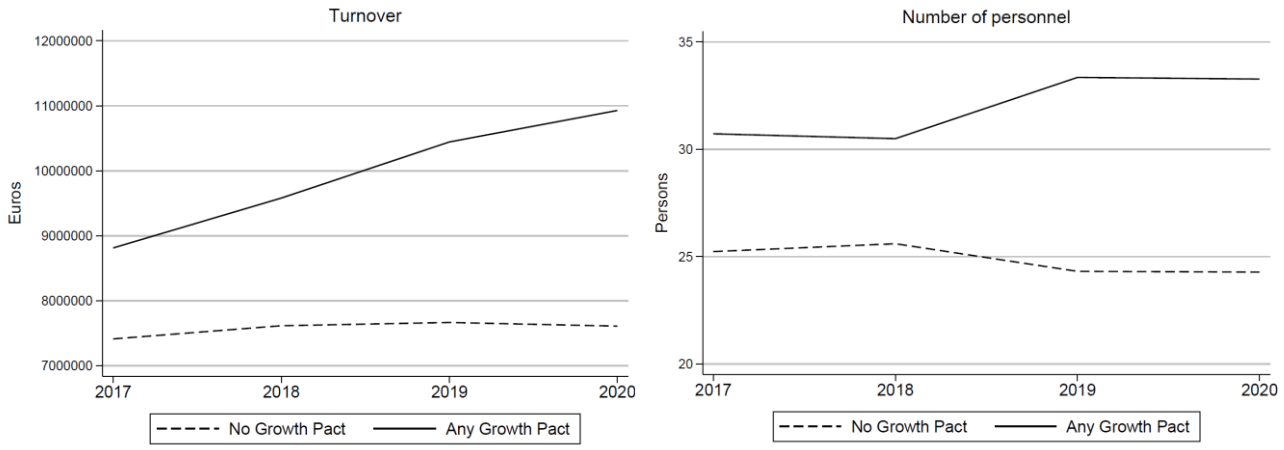


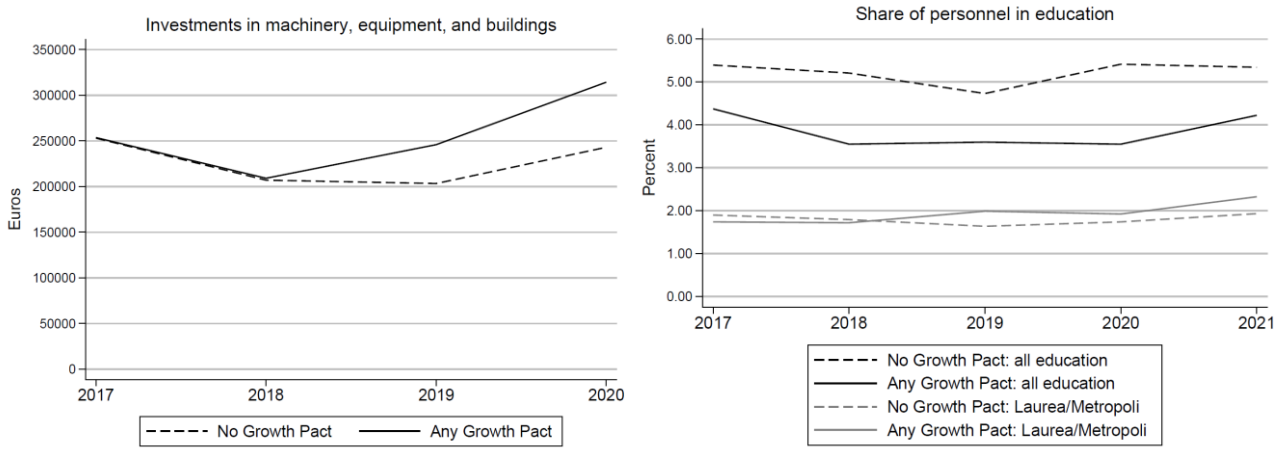
Note. The graphs show the distribution of the employee characteristics separately for the firms that participate in the services related to Growth pact 1, 2, or 3.

Figure 5 plots the trends in firm level characteristics for those participating in any of the project services vs. none. We can see that the services are participated by companies that are growing in terms of turnover, personnel, and investments. Moreover, there is a clear upward trend in enrolment in the local universities of applied sciences, namely Laurea and Metropolia, among the companies that also took part in the project services when compared to those companies that did not. These results are in line with the prior research that finds large and innovative firms without financial constraints to be more likely investing in workplace training.

These differences in trends of participating vs. not participating companies could be an indication of a treatment effect. However, the different trends between the two groups can just as well be due to selection. That is, companies that are growing, or whose employees are increasingly enrolling in the local education institutions, may be more willing to take part in the services provided by the Urban Growth Vantaa. Section 6 and 7 show results that are disentangled from such selection, and the results here should be interpreted merely as characterization of the participating companies.

Figure 5 Trends by participation status





Note. The graphs on the left panel show the mean of turnover, number of personnel, investments in machinery, equipment, and buildings, and the share of those participation in higher education (all institutions and Laurea or Metropolia), separately for the firms that take part in any of project services and for those that do not.

The growing companies are likely to experience more constraints and therefore, it may be a very positive thing that this is the group of firms that the project services attract. On the other hand, the growing firms may have also other services available to them, and therefore the project services may be merely replacing other alternatives the companies could turn to. We next turn to impact evaluation to get a better understanding of the effects of the project.

6. Analysis based on register data

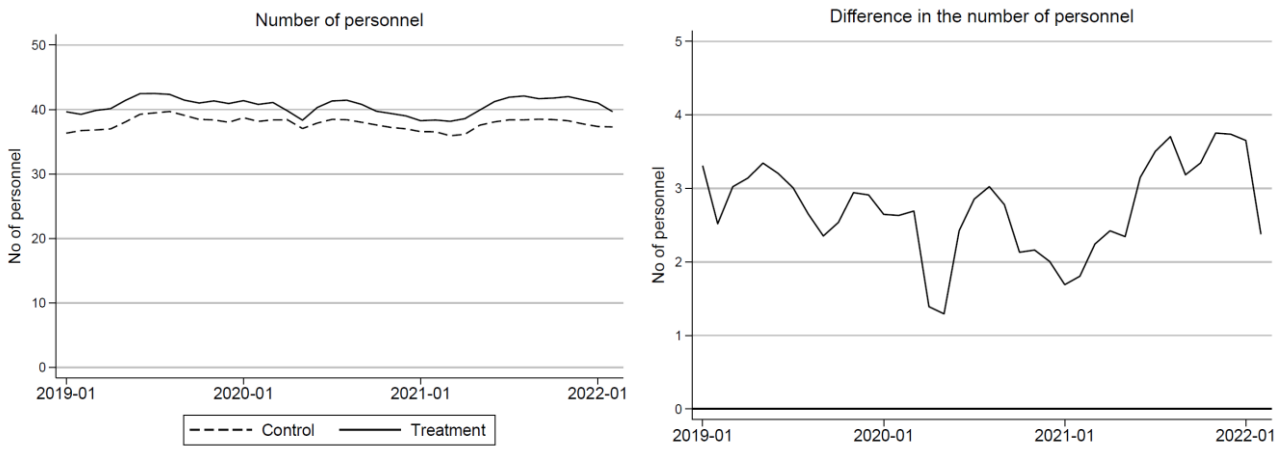
Our analysis uses two main data sources both with different pros and cons. We begin the impact evaluation with register data which provides credible information on all the companies in both treatment and control groups. We use various indicators to evaluate the impact of the Urban Growth Vantaa service and incentive models on the areas targeted in the growth pacts: 1) recruiting and training new employees, 2) updating skills and competences of employees, and 3) digitalization and adoption of new technologies.

6.1 Growth pact 1: recruiting and training new employees

The Growth pact 1 aims at boosting employment by providing incentives and removing barriers to find and recruit new employees. The Incomes Register of Statistics Finland provides us information on all the individuals employed by the firms in our target group over the whole project period. We can use this information to evaluate the impact of the project on employment.

Figure 6 plots the average number of personnel each month from January 2019 until January 2022 separately for the firms in the treatment and control groups as well as the difference in these trends. We can see that the average employment is higher in the treatment firms than in the control firms for the whole period. Since the project was launched only in the beginning of the year 2019 and the firms in the treatment group were not even contacted before the spring 2019, the project cannot be responsible for the difference in the employment levels visible in the beginning of the period. Furthermore, it appears that the employment in both groups follows a very similar trend on average. Hence, we do not find evidence of employment effects, and there is certainly no indication that the project goal, 200 new employees, has been reached.

Figure 6 Trends in the number of personnel by treatment status



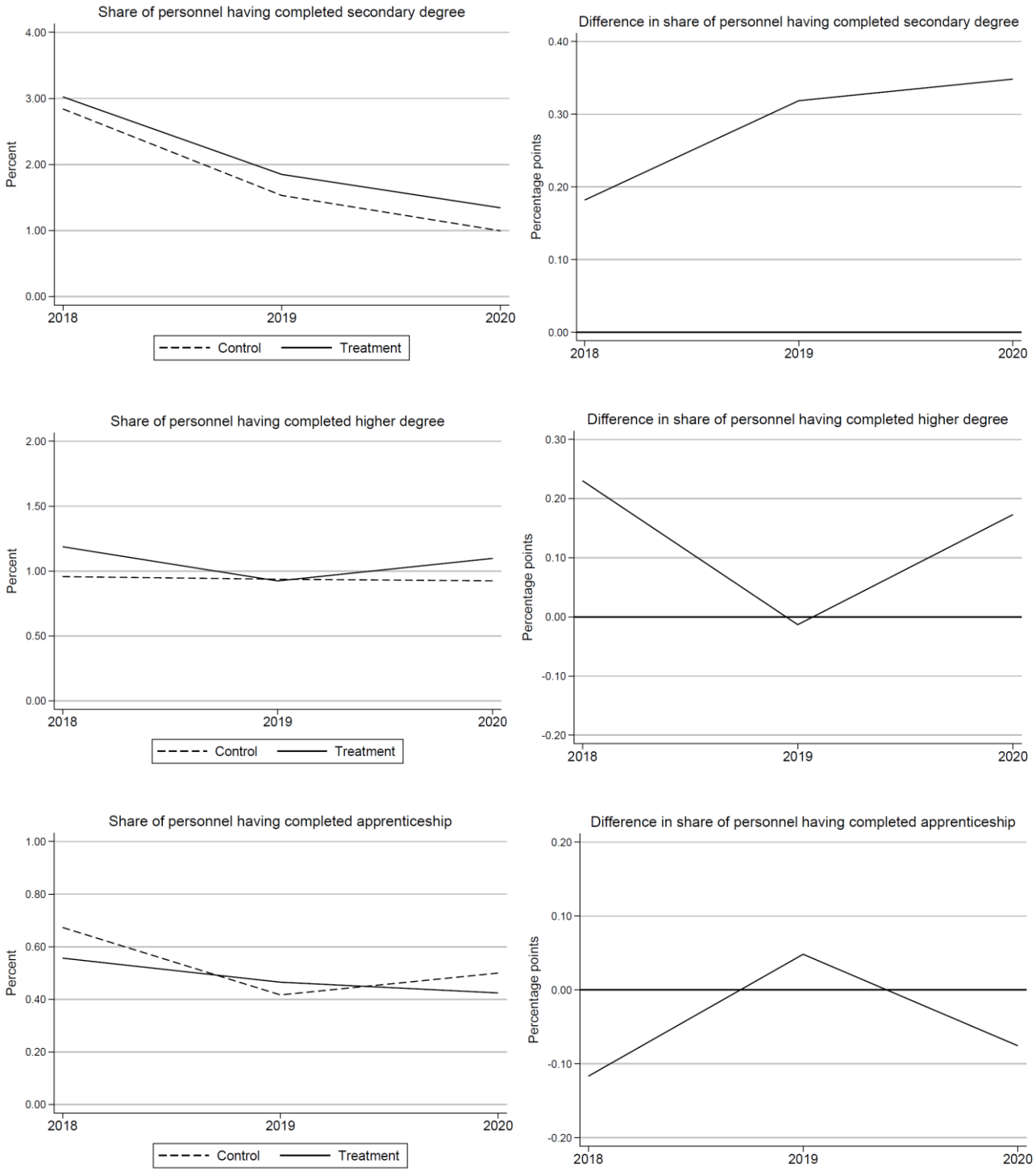
Note. The graph on the left shows the mean number of employees separately for the firms in the treatment and control groups. The graph on the right plots the difference in the means.

6.2 Growth pact 2: updating skills and education level

The Growth pact 2 focuses on updating the skills and education level of employees. We use two administrative register datasets to examine how the project models have impacted the likelihood of employees to participate in formal education. We have information on all post-compulsory degrees until the end of the year 2020. The benefit of this data is that it allows us to study completed degrees by education level and type. However, since the target duration of a post-compulsory degree is typically at least a year, it is very unlikely that the effects of the projec could be observed this quickly. We complement this data with information on enrolment choices which we can follow until the end of 2021. The drawback of these data is that they include information only on higher education enrolment.

Figure 7 reports the trends in completed degrees separately for upper secondary education (general and vocational programs), higher education (including universities and universities of applied sciences), and apprenticeship training (alternative for some vocational programs). As before, we plot the trends by treatment status, and show their difference. Firstly, the share of employees completing secondary degrees has fallen since 2018 in both the treatment and control groups, but the drop has been on average slightly smaller in the treatment firms. The pattern of completed higher and apprenticeship degrees is less clear. Completing these types of degrees is less common than completing secondary degrees, and thus, the choice of merely few persons will affect these trends making it very hard to draw any conclusions from them. However, these figures do not provide any support for the prospect that the project goal of 30 apprenticeships have been reached.

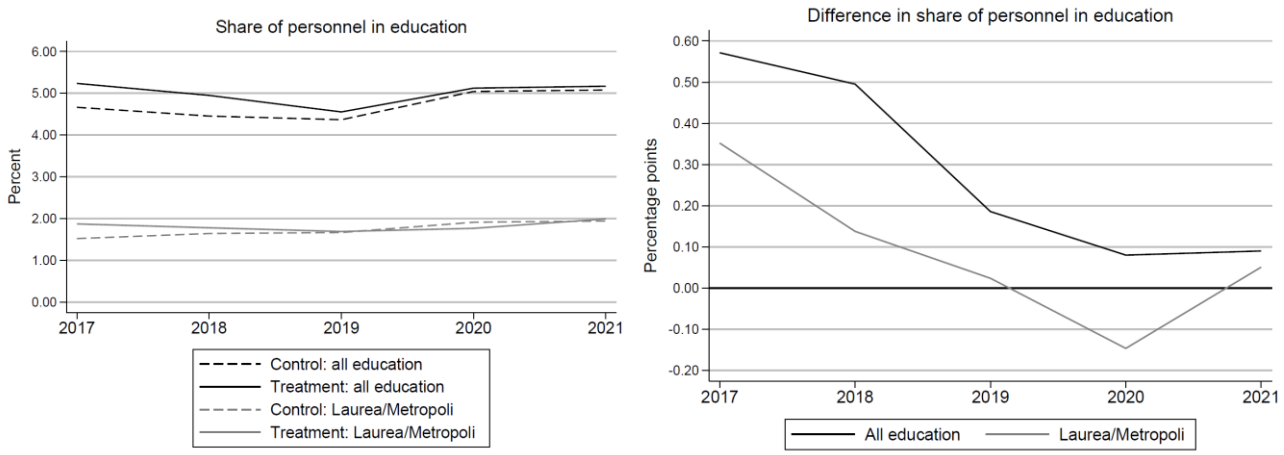
Figure 7 Trends in completed degrees by treatment status



Note. The graphs on the left panel show the mean share of employees who completed a secondary, higher, or apprenticeship degree between the years 2018 and 2020, separately for the firms in the treatment and control groups. The right panel plots the difference in the means.

Figure 8 plots the enrolment in any higher education as well as separately for Laurea and Metoripolia, which are the two universities of applied sciences operating in the Vantaa region, as well as project partners of the Urban Gowth Vantaa. We can see that prior to the project period, the firms in the treatment group had slightly higher share of employees enrolled in higher education in general as well as in Laurea and Metropolia, although the gap was decreasing every year. This trend continued after the launch of the project until the year 2020. After this, there was no change in the difference in enrolment in any higher education, and gap was again increasing for the enrolment in Laurea or Metropolia. At the end of the observation period, the employees in both groups were almost as likely to enrol in higher education, and in Laurea or Metropolia. According to these results, the service and incentive models did not impact the likelihood of the employees to participate in formal education.

Figure 8 Trends in enrolment by treatment status



Note. The graph on the left shows the mean share of employees who are enrolled in any higher education, and in Laurea or Metropolia between the years 2017 and 2021, separately for the firms in the treatment and control groups. The graph on the right-hand-side plots the difference in the means.

6.3 Growth pact 3: digitalisation and adoption of new technologies

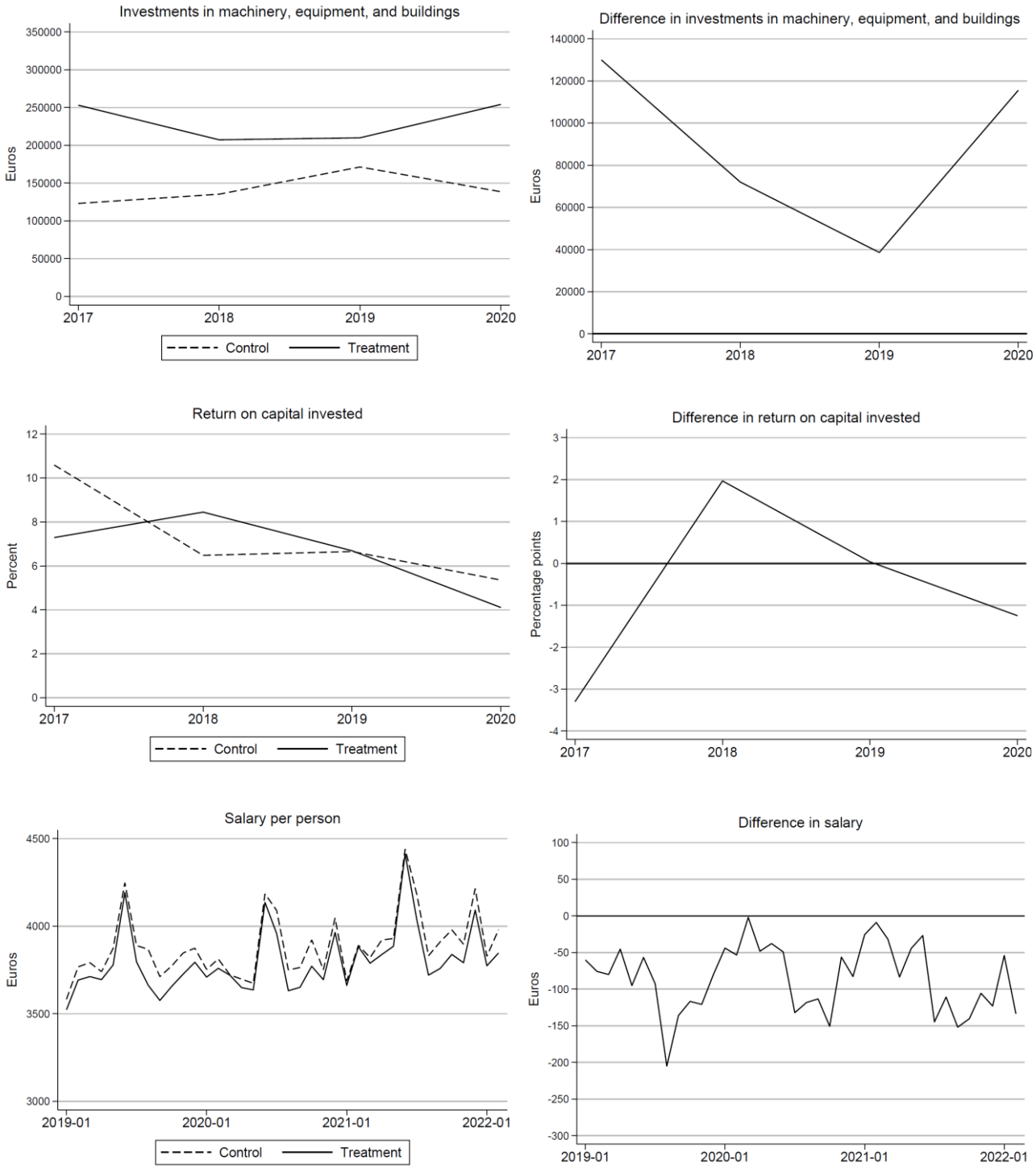
Growth pact 3 aims at boosting productivity and growth potential in the region by increasing adoption of new innovations and technologies. From the Financial statement data, we have information on investments in machinery, equipment, and buildings. Unfortunately, this information may fail to capture many digitalization choices of the firms. Since the adoption of new technologies and modernization of the production may also show up in increased productivity, we complement the analysis with two measures on the productivity of the firms. Firstly, we use

information on returns to investments collected from the Financial statement data. Furthermore, we use the Incomes Register to evaluate the effects of the project models on average salaries.

Figure 9 plots first the mean of investments in machinery, equipment, and buildings for the years between 2017 and 2020 by treatment status, and the difference of the means. We can see that the investments were at a higher level in the firms in the treatment group prior to the Urban Growth Vantaa project, but the gap was decreasing. Since 2019 there was a turn after which the investments started again to increase in the firms in the treatment group and decrease in the control firms.

The graph also includes two measures, returns to investment and average salary, which are indicative of the firms' productivity. The difference between the trends of the firms in the treatment and control groups do not show any clear pattern which would suggest that the service and incentive models have impacted these outcomes.

Figure 9 Trends in investments and productivity by treatment status



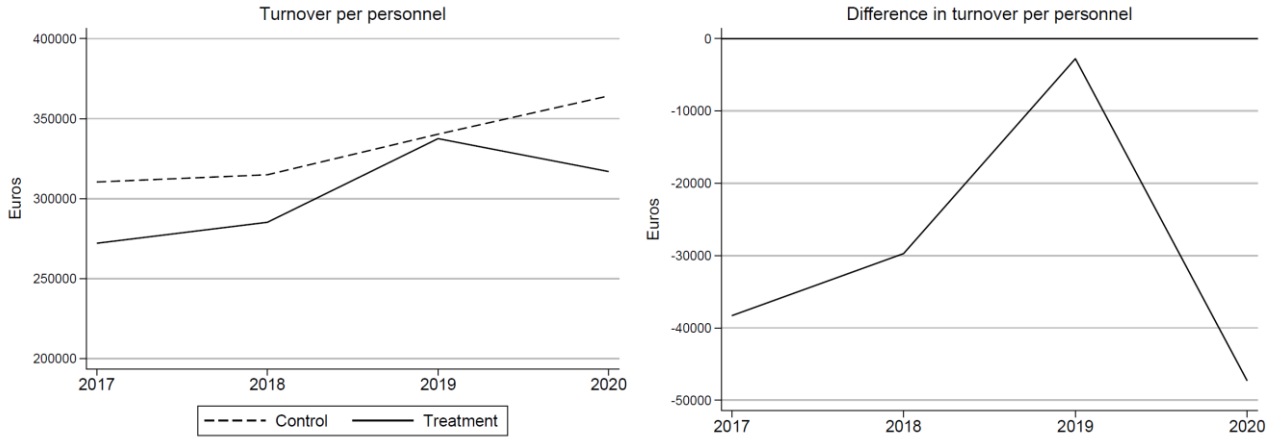
Note. The graphs on the left panel show the mean of investments in machinery, equipment, and buildings, returns to investments, and mean salaries per person, separately for the firms in the treatment and control groups. The right panel plots the difference in the means.

6.4 Growth indicators

The impact evaluation also includes indicators that provide information on whether the service and incentive models have affected the growth trajectories of the companies. Section 6.1 showed that the project had no effect on the firm size measured by the number of personnel. Furthermore, the findings presented in Section 6.3. suggested that there has not been an impact on the productivity of the firms. Finally, here we explore the effects of the models on the turnover of firms.

Figure 10 reports the mean turnover separately by treatment status and the difference in these trends. We can see that the average turnover of the treatment firms has only decreased during the project period when compared to the firms in the control group. Hence, we find no indication that the project has created growth in the Vantaa region.

Figure 10 Trends in turnover by treatment status



Note. The graft on the left shows the mean turnover separately for the firms in the treatment and control groups. The graph on the right plots the difference in the means.

6.5. Summary

According to these findings, the Urban Growth Vantaa project did not increase employment, the likelihood of the employees to participate in formal education, investments, productivity, or turnover, at least in a way that could be detected by the average statistics. There are some positive signs. For example, the decreasing trend in employees completing secondary degrees is steeper for the firms in the control group when compared to those in the treatment group since the year 2019. However, most of the trends fluctuate without any clear pattern, and provide no indication that the

project models would have had an impact on these outcomes. Furthermore, these findings do not suggest that the project goals of 200 new employees, or 30 apprenticeships have been reached.

As discussed in Section 4.2., the actual effect of the service and incentive models would have needed to be almost unrealistically large to be visible in the average statistics. It may also take a long time, to change the decision making of firms, and thus, the observation periods here may be much too short. In Section 7, we use survey data to examine whether the models affected the attitudes and information and thus, increased the likelihood that firms make new recruitments, or invest more in updating the skills of their employees or in digitalization in the future.

7. Analysis based on survey data

Survey data allows us to capture some aspects of the phenomenon that are unavailable in the register data as well as to get more recent information on the choices of companies. We use survey data to explore the effects of the Urban Growth Vantaa models on information, attitudes, and participation decisions of the firms regarding the three themes of the growth pacts: 1.) recruitment and training of new employees, 2.) updating skills and education level of their employees, and 3) digitalization and adoption of new technologies. This information helps us to pick up early signs of changes in the growth trajectories of the firms. However, survey data comes with an additional challenge regarding the coverage of the data. We begin our analysis by examining the response rate and selection into the survey to gain better understanding of the representativeness of the data.

The data comes from three survey rounds, a baseline survey, one conducted in the middle of the project period, and one at the end of the project. Since only a few percent of the firms took part in all rounds of the survey, we focus here on the results from cross-sectional data which uses information on all the responses at each round. Our midterm report included also results from using panel data on the firms that responded to all survey rounds. The results were similar to those calculated using cross-sectional data.

To analyse the survey data, we exploit difference-in-difference calculations where we compare the change in the mean values of the given outcome that takes place between survey rounds (from round 1 to round 2, from 2 to 3, or from 1 to 3) in the treatment firms and control firms. The difference in the differences in the mean values between the treatment and control firms provides us with information about the impact of the service and incentive models on the various outcomes.

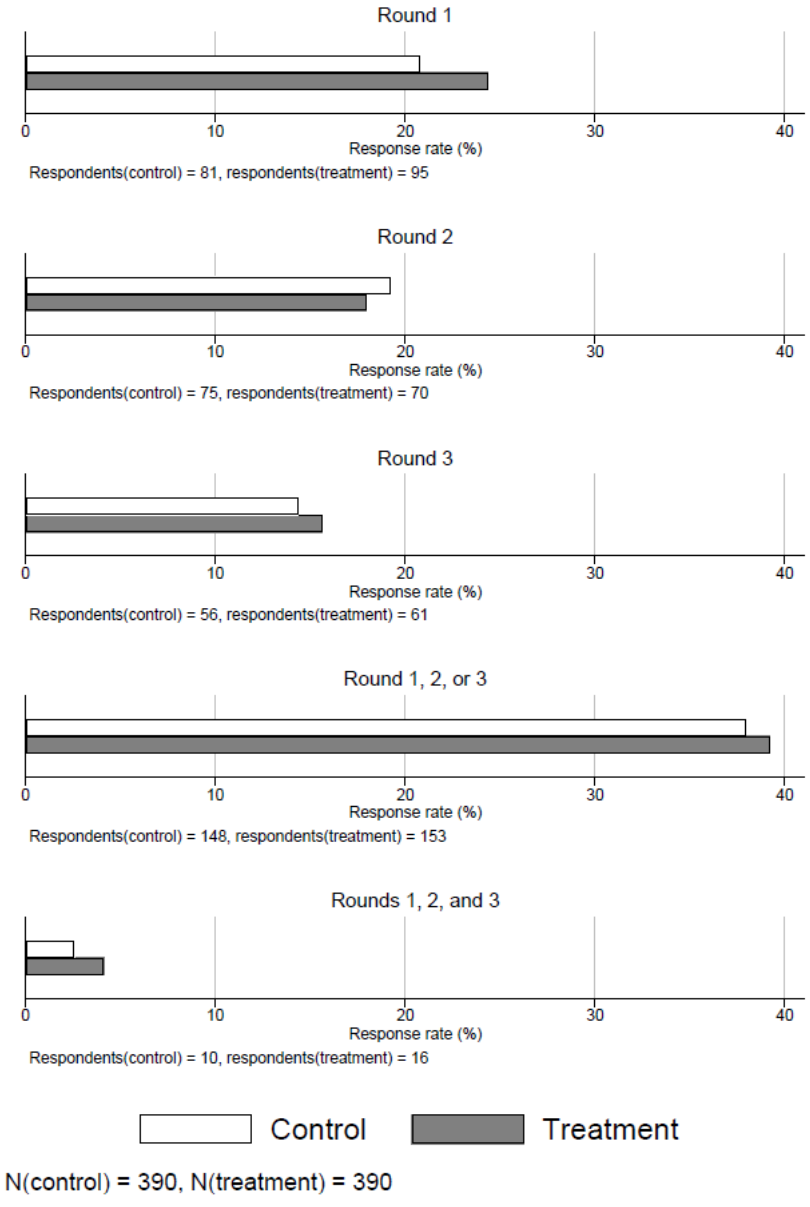
7.1 Participation in the survey

The main challenges with the survey data are to maximize the response rate and to attract similar participation rate across various types of firms. Moreover, the firms in both treatment and control groups should be equally represented in the data.

Figure 11 shows the response rate by treatment status and separately for each survey round as well as for those responding to any or all the survey rounds. The first survey round reaches 25 and 21 percent response rates for the treatment and control group firms respectively. These are good participation rates for this type of survey. However, they are still unfortunately too low to allow for

reliable inference. Unsurprisingly, the latter two rounds of the survey that were conducted during the Covid-19 pandemic received lower response rates. Close to 40 percent of the firms in both groups took part in the survey in at least one round, and less than 5 percent of the firms participated in all rounds.

Figure 11 Participation rate in survey by treatment status and survey rounds

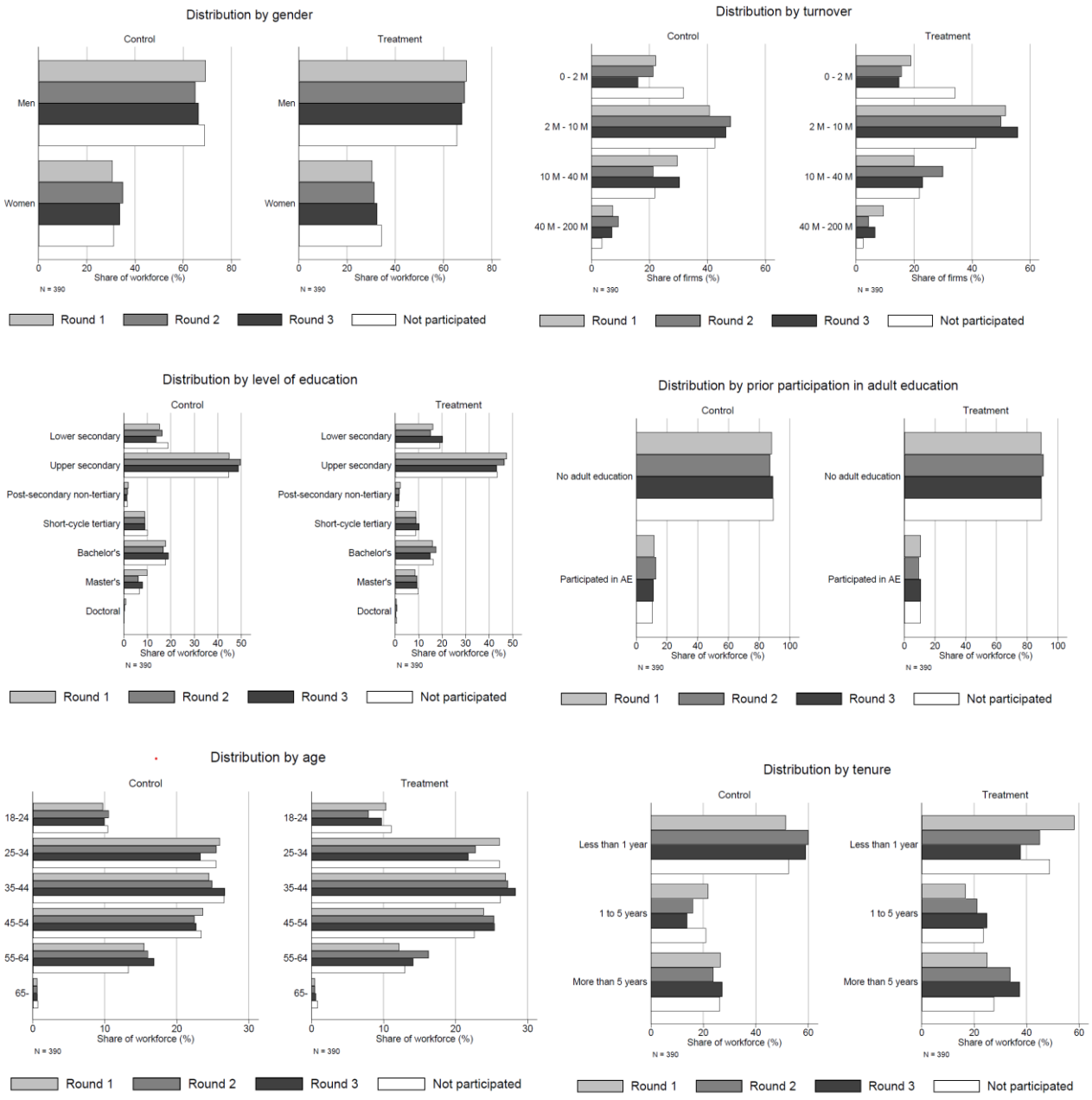


Note. The graph shows the share and number of firms taking part in the survey for each round 1 to 3, for any round, and for all the rounds. These are presented separately for the firms in the treatment and control groups.

Figure 12 reports the characteristics of the firms and their employees separately by treatment status and survey participation. The characteristics of the firms are quite well balanced across treatment

and response status, but there are some differences. For example, the employees of the firms in the treatment group that took part in the second and third round surveys are on average older and have more tenure when compared to the control group firms participating in these rounds of the survey. The opposite is true for the employees of the participating firms in the first round of the survey and for those not taking part in any of the rounds. However, the differences are relatively small.

Figure 12 Firm and employee characteristics in the firms by treatment status and participation



Note. The graphs show the distribution of the firm and employee characteristics separately for the firms that either participate in the three survey rounds 1,2 or 3, or do not participate in any of the survey rounds, and by treatment status.

7.2 Growth pact 1: recruiting and training new employees

We saw in Section 6.1. that the incentive and service models of Urban Growth Vantaa have not increased employment. Lack of information or poor perception can prevent firms from hirings new employees even if it were beneficial for them. For example, firms can have incomplete information about potential benefits of hiring or about ways to recruit skilled labour. We examine the effects of the project models on the recruitment and training of new employees by asking the firms about the barriers to hiring, and whether they have used or would be willing to use various services and education schemes that are mainly linked to new employees.

Table 1 shows the share of firms stating that lack of information is a significant factor limiting the recruitment of new employees separately by treatment status. We can see that initially, in round 1 survey, a larger share of the firms in the control group finds lack of information to be a significant factor limiting recruitment when compared to the firms in the treatment group. However, from survey round 1 to 2, the share increases in the treatment group, but decreases in the control group. The trend is even more pronounced from the round 1 survey to round 3.

The difference-in-difference calculations represented in the third row of Table 1 show that the share of the treatment firms experiencing information constraints increases over 8 percentage points more than the corresponding share in the control group. These findings suggest that the project did not have positive effect on the information of the firms. Although, it is possible, that increasing information and improving attitudes could also increase the share of firms acknowledging the potential information barriers. Therefore, the interpretation of this results is not necessarily straight forward.

Table 1 Lack of information as a barrier to recruitment

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
Treatment Group	1.03	2.86	3.18	1.83	0.32	2.14
Control Group	6.17	1.32	0.00	-4.86	-1.32	-6.17
Difference	-5.14	1.54	3.18	6.68	1.63	8.32
Observations	178	146	120			

Note. Table shows the average share of the firms stating that a lack of information is a significant factor limiting the recruitment of new employees reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the difference in the means for each round (Columns 1-3) as well as the difference-in-differences calculations (Columns 4-6). *The survey question:* What are the significant factors limiting the recruitment of new employees in your company / workplace? If lack of information is a significant factor, gets value 1, otherwise 0.

Table 2 examines perceptions of the firms regarding other possible barriers to hiring. We can see that the share of firms stating that they have no need for recruiting new employees increases in both groups from survey round 1 to survey round 2 and in the control group also from survey round 2 to round 3. This is hardly surprising since the rounds 2 and 3 are conducted during the pandemic. The difference-in-difference analysis shows that the share increases more in the control group when compared to the treatment group, which can be taken as a positive signal of the project. In contrast, the share of companies that consider recruiting and hiring too expensive, or that perceive there to be no suitable professionals available has been decreasing at a faster rate in the control group than in the treatment group between the survey rounds.

Table 2 Barriers to recruitment of new employees

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
No need						
Treatment Group	16.50	30.00	19.05	13.51	-10.95	2.55
Control Group	8.64	17.11	21.05	8.46	3.95	12.41
Difference	7.85	12.90	-2.01	5.04	-14.90	-9.86
Observations	178	146	120			
No suitable experts available						
Treatment Group	73.20	57.14	69.84	-16.05	12.70	-3.36
Control Group	74.07	57.90	63.16	-16.18	5.26	-10.92
Difference	-0.88	-0.75	6.68	0.13	7.43	7.56
Observations	178	146	120			
Recruitment is time consuming / expensive						
Treatment Group	21.65	15.71	14.29	-5.94	-1.43	-7.36
Control Group	18.52	18.42	12.28	-0.10	-6.14	-6.24
Difference	3.13	-2.71	2.01	-5.84	4.71	-1.13
Observations	178	146	120			
Hiring is expensive / risky						
Treatment Group	34.02	32.86	33.33	-1.16	0.48	-0.69
Control Group	43.21	38.16	28.07	-5.05	-10.09	-15.14
Difference	-9.19	-5.30	5.26	3.89	10.56	14.45
Observations	178	146	120			

Note. Table shows the average share of the firms that find the given reason listed to be a barrier to hiring new employees reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the difference in the means for each round (Columns 1-3) as well as the difference-in-differences calculations (Columns 4-6). *The survey question:* What are the significant factors limiting the recruitment of new employees in your company / workplace? If significant factor limiting recruitment, gets value 1, otherwise 0.

The survey included several questions about the behaviour of the firms regarding the recruitment and training decisions of the firms. Table 3 shows the share of firms that have invested in recruiting new employees during the past couple of years. Unsurprisingly, the share has decreased during the pandemic years, but the decrease has been larger in the control firms. Next, we explore the effects of the project on the likelihood of firms using various services and education paths that could be used as tools to invest in finding and hiring new employees.

Table 3 Investment in recruiting employees during past couple of years

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
Invested in recruitment						
Treatment Group	90.43	90.00	88.89	-0.43	-1.11	-1.54
Control Group	96.25	90.79	91.23	-5.46	0.44	-5.02
Difference	-5.82	-0.79	-2.34	5.03	-1.55	3.49
Observations	174	146	120			

Note. Table shows the average share of the firms that have invested in recruiting new employees recently reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the difference in the means for each round (Columns 1-3) and the difference-in-differences calculations (Columns 4-6). *The survey question:* Has your company invested in recruitment of new employees over the past couple of years? If yes, 1, otherwise 0.

Table 4 reports the share of firms that have used or are using wage subsidy as a part of the pay of an employee. The results show that the share dropped in the treatment group from each survey to the next, while it grew in the control group from survey round 2 to 3. The difference-in-difference calculations confirms that the share decreased in the treatment group firms compared to those in the control group.

Table 4 Usage of wage subsidies

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
Treatment Group	31.96	30.00	28.57	-1.96	-1.43	-3.39
Control Group	29.63	27.63	31.58	-2.00	3.95	1.95
Difference	2.33	2.37	-3.01	0.04	-5.38	-5.34
Observations	178	146	120			

Note. Table shows the average share of the firms that have used wage subsidy as a part of the pay for an employee reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the difference in the means for each round (Columns 1-3) and the difference-in-differences calculations (Columns 4-6). *The survey question:* Has your company used or is using wage subsidies as a part of the pay of an employee? If wage subsidy is being used or has been used in some form, gets value 1, otherwise 0.

Table 5 reports the share of firms that have used or are using the given education and training scheme. In this section we focus on education and training paths typically used with new employees. The results show that the usage of all these services has developed more negatively in the treatment group firms when compared to trend in the control group. The share of firms using apprenticeship training or training agreements increased more in the control group than in the treatment group from survey round 1 to round 3. Furthermore, the share of firms using study related internships, project, or theses, or workforce training decreased in both groups from round 1 to round 3, but more in the treatment group. These results suggest that the project models did not increase participation in any of these training schemes.

Table 5 Usage of education and training pathways

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
Apprenticeship training						
Treatment Group	36.08	34.29	41.27	-1.80	6.98	5.19
Control Group	28.40	42.11	40.35	13.71	-1.75	11.96
Difference	7.69	-7.82	0.92	-15.51	8.74	-6.77
Observations	178	146	120			
Training agreements						
Treatment Group	6.19	15.71	7.94	9.53	-7.78	1.75
Control Group	17.28	7.90	19.30	-9.39	11.40	2.01
Difference	-11.10	7.82	-11.36	18.92	-19.18	-0.26
Observations	178	146	120			
Study-related internships, projects, or theses						
Treatment Group	50.52	50.00	46.03	-0.51	-3.97	-4.48
Control Group	55.56	44.74	52.63	-10.82	7.90	-2.92
Difference	-5.04	5.26	-6.60	10.30	-11.86	-1.56
Observations	178	146	120			
Workforce training						
Treatment Group	14.43	15.71	11.11	1.28	-4.60	-3.32
Control Group	7.41	10.53	7.02	3.12	-3.51	-0.39
Difference	7.03	5.19	4.09	-1.84	-1.10	-2.93
Observations	178	146	120			
Any of the above						
Treatment Group	75.26	70.00	71.43	-5.26	1.43	-3.83
Control Group	66.67	67.11	68.42	0.44	1.32	1.75
Difference	8.59	2.89	3.01	-5.70	0.11	-5.58
Observations	178	146	120			

Note. Table shows the average share of the firms that have used the given education and training pathway listed in the table reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the difference in the means for each round (Columns 1-3) and the difference-in-differences

calculations (Columns 4-6). *The survey question:* Which of the following types of education and training pathways your company has used / is using? If has used or is using the given education or training pathway, gets value 1, otherwise 0.

Table 6 reports the share of the firms willing to use the given service in the future. Again, we find massive negative trend among the firms in the treatment group when compared to the firms in the control group. The difference-in-difference value between round 1 and round 3 survey, is negative for all the schemes.

Table 6 Willingness to use the given education and training pathways

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
Apprenticeship training						
Treatment Group	76.74	63.79	64.82	-12.95	1.02	-11.93
Control Group	64.29	75.00	70.83	10.71	-4.17	6.55
Difference	12.46	-11.21	-6.02	-23.67	5.19	-18.48
Observations	156	126	102			
Traineeships						
Treatment Group	44.74	30.44	33.33	-14.30	2.90	-11.40
Control Group	52.38	51.72	65.91	-0.66	14.19	13.53
Difference	-7.64	-21.29	-32.58	-13.65	-11.29	-24.93
Observations	139	104	92			
Study-related internships						
Treatment Group	77.38	74.07	74.51	-3.31	0.44	-2.87
Control Group	71.64	76.19	79.17	4.55	2.98	7.53
Difference	5.74	-2.12	-4.66	-7.86	-2.54	-10.40
Observations	151	117	99			
Recruitment training						
Treatment Group	39.74	32.61	31.92	-7.14	-0.69	-7.83
Control Group	35.48	37.50	34.15	2.02	-3.35	-1.34
Difference	4.26	-4.89	-2.23	-9.15	2.66	-6.49
Observations	140	102	88			

Note. Table shows the average share of the firms willing to use the various training pathways reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the difference in the means for each round (Columns 1-3) and the difference-in-differences calculations (Columns 4-6). *The survey question:* Which of the following types of training schemes would your company be willing to use in the future? If willing to use in the future, gets value 1, otherwise 0.

Finally, we examine how the service and incentive models have affected the collaboration with various agents in recruitment or staff competences. According to the findings in Table 7, the share of firms collaborating with TE offices or with staffing agencies has decreased in both groups from

survey round 1 to round 2 and round 3, but the drop has been again larger in the treatment firms. The only positive finding here is that the firms in the treatment group have become more likely to co-operate with the city employment offices than the firms in the control group. However, the difference is very small.

Table 7 Collaboration with employment services in recruitment

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
TE office						
Treatment Group	42.27	32.86	30.16	-9.41	-2.70	-12.11
Control Group	34.57	30.26	24.56	-4.31	-5.70	-10.01
Difference	7.70	2.59	5.60	-5.11	3.00	-2.10
Observations	178	146	120			
City employment services						
Treatment Group	6.19	4.29	7.94	-1.90	3.65	1.75
Control Group	3.70	3.95	5.26	0.24	1.32	1.56
Difference	2.48	0.34	2.67	-2.14	2.34	0.19
Observations	178	146	120			
Staffing agencies						
Treatment Group	49.49	45.71	39.68	-3.77	-6.03	-9.80
Control Group	54.32	42.11	45.61	-12.22	3.51	-8.71
Difference	-4.84	3.61	-5.93	8.45	-9.54	-1.10
Observations	178	146	120			

Note. Table shows the average share of the firms that have collaborated with the listed agent reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the difference in the means for each round (Columns 1-3) and the difference-in-differences (Columns 4-6). *The survey question:* Which of the following agents have you collaborated with regarding staff competences or recruitment? If collaborated with the given agent, gets value 1, otherwise 0.

7.3 Growth pact 2: updating skills, competences, and education level of employees

In this section we examine how the project models have affected information, attitudes, and behaviour of the firms regarding improving the skills and education level of their employees. The administrative registers used in the analysis in Section 6, allowed us to examine participation only in formal post-compulsory education. From the survey data we have information also on various other types of education and training alternatives.

Table 8 reports the share of firms that perceived a lack of information as an obstacle to staff training. We can see that the share was initially higher in the treatment group firms and it rose in both groups

from survey round 1 to round 2 as well as from round 2 to 3. The growth of the share of the firms experiencing that lack of information hinders their decision to train staff was larger in the treatment firms between survey rounds 1 and 2 but smaller between the latter two rounds of survey when compared to the control firms. These results suggest that the Growth pact 2 models could have slightly mitigated the downward sloping trend. The difference-in-difference value calculated over the whole project period is close to zero.

Table 8 Lack of information about availability of training as a barrier to employee training

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
Treatment Group	11.34	12.86	17.46	1.52	4.60	6.12
Control Group	7.41	10.53	14.04	3.12	3.51	6.63
Difference	3.93	2.33	3.43	-1.60	1.09	-0.51
Observations	178	146	120			

Note. Table shows the average share of the firms stating that a lack of information is a significant factor limiting the decision to train employees reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the difference in the means for each round (Columns 1-3) and the difference-in-differences (Columns 4-6). *The survey question:* What are the significant factors limiting the training of your staff? If lacking information is a significant factor, gets value 1, otherwise 0.

Table 9 reports how firms perceive other factors limiting their decision to update the skills of their employees. These results provide several positive signals of the developments of the attitudes of the treatment firms towards training employees. In contrast to the control group, the share of treatment firms that see no need for staff training has not increased during the project period. Furthermore, the share of treatment firms that consider training employees too expensive, laborious, or increasing the risk of key employees leaving has decreased more when compared to the control firms. However, the share of firms that do not find right kind of education to be available decreased more in the control group. This can be also an indication of the firms in the treatment group are now looking more actively for ways to train their staff. It should be noted that some of the positive developments in the treatment group do not coincide with the implementation of Growth pact 2.

Table 9 Factors limiting employee training

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
No need for training						
Treatment Group	20.62	15.71	20.63	-4.90	4.92	0.02
Control Group	13.58	5.26	15.79	-8.32	10.53	2.21

Difference	7.04	10.45	4.85	3.41	-5.61	-2.19
Observations	178	146	120			
Right kind of training not available						
Treatment Group	34.02	31.43	33.33	-2.59	1.90	-0.69
Control Group	39.51	36.84	31.58	-2.66	-5.26	-7.93
Difference	-5.49	-5.41	1.75	0.07	7.17	7.24
Observations	178	146	120			
Staff reluctant to participate						
Treatment Group	18.56	21.43	22.22	2.87	0.79	3.67
Control Group	18.52	21.05	22.81	2.53	1.75	4.29
Difference	0.04	0.38	-0.58	0.34	-0.96	-0.62
Observations	178	146	120			
Too expensive						
Treatment Group	35.05	35.71	15.87	0.66	-19.84	-19.18
Control Group	27.16	38.16	35.09	11.00	-3.07	7.93
Difference	7.89	-2.44	-19.21	-10.33	-16.77	-27.11
Observations	178	146	120			
Bureaucracy too laborious						
Treatment Group	16.49	8.57	6.35	-7.92	-2.22	-10.15
Control Group	11.11	15.79	3.51	4.68	-12.28	-7.60
Difference	5.38	-7.22	2.84	-12.60	10.06	-2.54
Observations	178	146	120			
Increases risk of key personnel departing						
Treatment Group	5.15	2.86	3.17	-2.30	0.32	-1.98
Control Group	2.47	3.95	7.02	1.48	3.07	4.55
Difference	2.69	-1.09	-3.84	-3.78	-2.75	-6.53
Observations	178	146	120			

Note. Table shows the average share of the firms stating the given reason to be a significant factor limiting the decision to train employees reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the difference in the means for each round (Columns 1-3) and the difference-in-differences calculations (Columns 4-6). *The survey question:* What are the significant factors limiting the training of your staff? If the given factor limiting staff training, gets value 1, otherwise 0.

Table 10 shows how the share of the firms investing in staff skills has developed. We can see that nearly all firms have invested in staff training, but that the share has been decreased during the project period. The share of firms investing in staff training has dropped more in the control group.

Table 10 Investment in staff skills during past couple of years

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
Invested in staff skills						
Treatment Group	92.63	82.61	87.30	-10.02	4.69	-5.33
Control Group	91.25	84.21	84.21	-7.04	0.00	-7.04
Difference	1.38	-1.60	3.09	-2.98	4.69	1.71

Observations	175	145	120

Note. Table shows the average share of the firms that have invested in staff training recently reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the difference in the means for each round (Columns 1-3) and the difference-in-differences calculations (Columns 4-6). *The survey question:* Has your company invested in staff training over the past couple of years? If yes, gets value 1, otherwise 0.

Table 11 examines what type of schemes firms have used to support the training of their employees. The results show that the trend has been worse in the treatment group especially regarding enabling training during the working hours and providing information about training alternatives. However, the share of firms using some other way to support staff training (than what is listed in Table 11) has grown in the treatment group but decreased in the control group. One possible explanation for this development is that some of the firms in the treatment group have supported their staff training via services provided by the Urban Growth Vantaa project.

Table 11 Usage of the given support scheme

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
Organized own / outsourced training						
Treatment Group	79.38	84.29	79.37	4.90	-4.92	-0.02
Control Group	87.65	81.58	87.72	-6.08	6.14	0.06
Difference	-8.27	2.71	-8.35	10.98	-11.06	-0.08
Observations	178	146	120			
Enabled training during working hours						
Treatment Group	80.41	80.00	74.60	-0.41	-5.40	-5.81
Control Group	76.54	77.63	82.46	1.09	4.82	5.91
Difference	3.87	2.37	-7.85	-1.50	-10.22	-11.72
Observations	178	146	120			
Provided opportunities for advancement through skills acquisition						
Treatment Group	23.71	28.57	33.33	4.86	4.76	9.62
Control Group	38.27	30.26	47.37	-8.01	17.11	9.10
Difference	-14.56	-1.69	-14.04	12.87	-12.34	0.53
Observations	178	146	120			
Arranged training through an employer training deduction						
Treatment Group	9.28	12.86	3.17	3.58	-9.68	-6.10
Control Group	12.35	7.89	5.26	-4.45	-2.63	-7.08
Difference	-3.07	4.96	-2.09	8.03	-7.05	0.98
Observations	178	146	120			
Provided information on training options						
Treatment Group	36.08	20.00	26.98	-16.08	6.98	-9.10
Control Group	22.22	28.95	22.81	6.73	-6.14	0.58
Difference	13.86	-8.95	4.18	-22.81	13.12	-9.68

Observations	178	146	120			
Some other way						
Treatment Group	7.22	8.57	9.52	1.35	0.95	2.31
Control Group	4.94	7.89	1.75	2.96	-6.14	-3.18
Difference	2.28	0.68	7.77	-1.60	7.09	5.49
Observations	178	146	120			

Note. Table shows the average share of the firms that have used the given support scheme listed in the table reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the difference in the means for each round (Columns 1-3) and the difference-in-differences calculations (Columns 4-6). *The survey question:* Which of the following types of support schemes your company has used / is using? If has used or is using the given scheme, gets value 1, otherwise 0.

Table 12 provides information on the share of the firms using various education and training pathways. The most popular education and training alternative for both group of firms is continuing education and tailored coaching with around 30% of the firms using the pathway in the beginning of the project period. Training vouchers were used only by a few percent of the firms. We can see that again, the alternative "some other way" has increased its share substantially in the treatment firms compared to the firms in the control group. In contrast, the trend was more positive in the control group especially regarding the alternative of open university of applied sciences/university. This result is mainly driven by the changes from survey round 1 to round 2. These results are quite well in line with the results based on register data (see Section 6.2.).

Table 12 Usage of the given education and training pathways

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
Continuing education and tailored coaching						
Treatment Group	32.99	28.57	31.75	-4.42	3.17	-1.24
Control Group	29.63	18.42	26.32	-11.21	7.89	-3.31
Difference	3.36	10.15	5.43	6.79	-4.72	2.07
Observations	178	146	120			
Open university of applied sciences/university						
Treatment Group	7.22	4.29	6.35	-2.93	2.06	-0.87
Control Group	9.88	17.11	22.81	7.23	5.70	12.93
Difference	-2.66	-12.82	-16.46	-10.16	-3.64	-13.80
Observations	178	146	120			
Other education at university of applied sciences/university						
Treatment Group	10.31	4.29	7.94	-6.02	3.65	-2.37
Control Group	9.88	9.21	10.53	-0.67	1.32	0.65
Difference	0.43	-4.92	-2.59	-5.36	2.34	-3.02
Observations	178	146	120			
Employees study with adult education support						

Treatment Group	6.19	4.29	6.35	-1.90	2.06	0.16
Control Group	3.70	10.53	3.51	6.82	-7.02	-0.19
Difference	2.48	-6.24	2.84	-8.72	9.08	0.36
Observations	178	146	120			
Training voucher						
Treatment Group	3.09	1.43	1.59	-1.66	0.16	-1.51
Control Group	2.47	2.63	1.75	0.16	-0.88	-0.71
Difference	0.62	-1.20	-0.17	-1.83	1.04	-0.79
Observations	178	146	120			
Some other way						
Treatment Group	14.43	21.43	28.57	7.00	7.14	14.14
Control Group	22.22	15.79	8.77	-6.43	-7.02	-13.45
Difference	-7.79	5.64	19.80	13.43	14.16	27.59
Observations	178	146	120			

Note. Table shows the average share of the firms that are using or have used the given support scheme listed in the table reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the difference in the means for each round (Columns 1-3) and the difference-in-differences calculations (Columns 4-6). *The survey question:* Which of the following types of education or training pathways your company has used / is using? If has used or is using the given scheme, gets value 1, otherwise 0.

Table 13 reports the share of firms willing to use the various education and training schemes in the future. We can see that there has been a massive drop in the willingness of the treatment firms to use the various alternatives compared to the development in the control group. This is quite striking given that the firms in both groups are assumed to be exposed similarly to the Covid pandemic. It is possible that compositional effects are responsible for these large differences, as the types of companies that respond to the survey may be different from one survey round to another, and that these changes are different between the treatment and control group. This would create substantial challenges for analysing and interpretating the data.

Table 13 Willingness to use different forms of training for employees in the future

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
Continuing education and tailored coaching						
Treatment Group	63.42	61.82	51.02	-1.60	-10.80	-12.40
Control Group	51.61	67.21	60.42	15.60	-6.80	8.80
Difference	11.80	-5.40	-9.40	-17.20	-4.00	-21.20
Observations	144	116	97			
Open university of applied sciences/university						
Treatment Group	33.80	39.58	33.33	5.78	-6.25	-0.47
Control Group	36.84	40.39	45.24	3.54	4.85	8.40
Difference	-3.04	-0.80	-11.91	2.24	-11.10	-8.87
Observations	128	100	87			

Other education at university of applied sciences/university						
Treatment Group	38.03	41.30	26.67	3.28	-14.64	-11.36
Control Group	37.93	44.23	37.50	6.30	-6.73	-0.43
Difference	0.10	-2.93	-10.83	-3.02	-7.91	-10.93
Observations	129	98	85			
Adult education support						
Treatment Group	43.59	35.42	26.09	-8.17	-9.33	-17.50
Control Group	25.00	40.00	43.90	15.00	3.90	18.90
Difference	18.59	-4.58	-17.82	-23.17	-13.23	-36.41
Observations	134	98	87			
Training vouchers						
Treatment Group	32.00	21.74	18.18	-10.26	-3.56	-13.82
Control Group	28.07	24.53	38.46	-3.54	13.93	10.39
Difference	3.93	-2.79	-20.28	-6.72	-17.49	-24.21
Observations	132	99	83			

Note. Table shows the average share of the firms willing to use the various schemes of staff training reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the difference in the means for each round (Columns 1-3) and the difference-in-differences calculations (Columns 4-6). *The survey question:* Which of the following types of training schemes would you company be willing to use in the future? If willing to use in the future, gets value 1, otherwise 0.

Table 14 considers how the firms are willing to support the development of employees' skills in the future. The results are again quite grim from the point of view of the project. The share of the firms willing to use any of the listed ways to support the training of their staff has again declined in the treatment group compared to control group. Next, we examine what topics the employees perceive important for staff training and whether they are planning to invest in them.

Table 14 Willing to support the development of employees' skills in the future

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
Organize own or obtain external training						
Treatment Group	93.68	92.31	91.53	-1.38	-0.78	-2.16
Control Group	96.25	91.89	94.64	-4.36	2.75	-1.61
Difference	-2.57	0.42	-3.12	2.98	-3.53	-0.55
Observations	175	139	115			
Allow training during working hours						
Treatment Group	90.91	85.71	80.36	-5.19	-5.36	-10.55
Control Group	83.12	80.56	87.04	-2.56	6.48	3.92
Difference	7.79	5.16	-6.68	-2.63	-11.84	-14.47
Observations	165	135	110			
Opportunities for advancement through skills acquisition						
Treatment Group	68.68	64.41	54.90	-4.27	-9.51	-13.77

Control Group	61.19	59.42	65.31	-1.77	5.89	4.11
Difference	7.48	4.99	-10.40	-2.49	-15.39	-17.89
Observations	150	128	100			
Providing information on training options						
Treatment Group	77.65	66.67	61.70	-10.98	-4.97	-15.95
Control Group	64.62	61.19	66.00	-3.42	4.81	1.39
Difference	13.03	5.47	-4.30	-7.56	-9.77	-17.33
Observations	150	124	97			

Note. Table shows the average share of the firms willing to use the various ways to support the training of their employees reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the difference in the means for each round (Columns 1-3) and the difference-in-differences calculations (Columns 4-6). *The survey question:* Which of the following ways of support would you company be willing to use in the future? If willing to use in the future, gets value 1, otherwise 0.

Table 15 shows in what topics the firms expect to need training in the future. The share of firms expecting to need training in sales and marketing promotion has increased in both groups during the project period, whereas the opposite is true for the other topics. For most topics there is a larger decrease or smaller increase in the share among the treatment firms than among the control firms.

Table 15 Expected future need for training in the topics

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
Artificial intelligence						
Treatment Group	47.13	49.12	29.82	2.00	-19.30	-17.30
Control Group	55.07	47.83	43.75	-7.25	-4.08	-11.32
Difference	-7.95	1.30	-13.93	9.24	-15.22	-5.98
Observations	156	126	105			
Robotics						
Treatment Group	43.02	37.50	23.21	-5.52	-14.29	-19.81
Control Group	47.06	35.82	38.78	-11.24	2.95	-8.28
Difference	-4.04	1.68	-15.56	5.71	-17.24	-11.53
Observations	154	123	105			
Sales promotion						
Treatment Group	75.58	83.08	78.69	7.50	-4.39	3.11
Control Group	79.45	77.94	85.19	-1.51	7.24	5.73
Difference	-3.87	5.14	-6.50	9.01	-11.63	-2.63
Observations	159	133	115			
Marketing promotion						
Treatment Group	71.60	75.41	76.67	3.80	1.26	5.06
Control Group	71.01	69.12	78.85	-1.90	9.73	7.83
Difference	0.59	6.29	-2.18	5.70	-8.47	-2.77
Observations	150	129	112			
IT skills						
Treatment Group	80.95	79.66	67.80	-1.29	-11.86	-13.16

Control Group	79.17	65.15	65.31	-14.02	0.15	-13.86
Difference	1.79	14.51	2.49	12.72	-12.02	0.70
Observations	156	125	108			
Learning-to-learn skills						
Treatment Group	63.29	58.00	44.23	-5.29	-13.77	-19.06
Control Group	65.63	43.33	53.19	-22.29	9.86	-12.43
Difference	-2.33	14.67	-8.96	17.00	-23.63	-6.63
Observations	143	110	99			

Note. Table shows the average share of the firms expecting to need training in the listed topics reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the difference in the means for each round (Columns 1-3) and the difference-in-differences calculations (Columns 4-6). *The survey question:* In what timeframe do you see your company / workplace needing training in the following topics? If need for training expected within two years, gets value 1, otherwise 0.

Table 16 shows the share of the firms willing to provide training for the training topics during the working hours. Here the development has actually been better in the treatment firms for the topics of artificial intelligence and sales promotion, and slightly also for robotics. For the other topics, the decline in the share willing to provide training during the working hours has been larger in the treatment group.

Table 16 Willingness to provide training for the topics during working hours

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
Artificial intelligence						
Treatment Group	17.86	10.53	17.86	-7.33	7.33	0.00
Control Group	18.57	14.71	12.25	-3.87	-2.46	-6.33
Difference	-0.71	-4.18	5.61	-3.47	9.79	6.33
Observations	154	125	105			
Robotics						
Treatment Group	20.24	8.77	14.29	-11.47	5.51	-5.95
Control Group	17.65	9.09	10.20	-8.56	1.11	-7.44
Difference	2.59	-0.32	4.08	-2.91	4.40	1.49
Observations	152	123	105			
Sales promotion						
Treatment Group	43.82	51.47	51.67	7.65	0.20	7.85
Control Group	40.00	45.21	35.19	5.21	-10.02	-4.82
Difference	3.82	6.27	16.48	2.45	10.22	12.66
Observations	164	141	114			
Marketing promotion						
Treatment Group	36.47	44.62	33.90	8.14	-10.72	-2.57
Control Group	33.33	34.29	31.37	0.95	-2.91	-1.96
Difference	3.14	10.33	2.53	7.19	-7.80	-0.61
Observations	154	135	110			

IT skills						
Treatment Group	40.00	42.86	29.31	2.86	-13.55	-10.69
Control Group	35.14	40.58	34.00	5.45	-6.58	-1.14
Difference	4.87	2.28	-4.69	-2.59	-6.97	-9.56
Observations	154	132	108			
Learning-to-learn skills						
Treatment Group	21.52	16.36	7.41	-5.16	-8.96	-14.11
Control Group	19.70	23.08	25.00	3.38	1.92	5.30
Difference	1.82	-6.71	-17.59	-8.54	-10.88	-19.42
Observations	145	120	98			

Note. Table shows the average share of the firms prepared to provide training in the listed topics during the working hours reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the difference in the means for each round (Columns 1-3) and the difference-in-differences calculations (Columns 4-6). *The survey question:* How long-term would your company be prepared to provide training in the following topics during working hours? If anything between 1 and 5 days, gets value 1, otherwise 0.

Finally, we explore how much the firms have collaborated with education institutions. The treatment firms have increased the co-operation more with universities and less with vocational schools and universities of applied sciences when compared to the control firms. This is perhaps surprising given that the project is a substantial collaboration with local agents including Vantaa vocational college Varia, and two universities of applied sciences, namely Laurea and Metropolia.

Table 17 Collaboration with education institutions

	Round 1	Round 2	Round 3	Round 2-1	Round 3-2	Round 3-1
Vocational schools						
Treatment Group	39.18	37.14	39.68	-2.03	2.54	0.51
Control Group	35.80	36.84	42.11	1.04	5.26	6.30
Difference	3.37	0.30	-2.42	-3.07	-2.72	-5.80
Observations	178	146	120			
University of applied sciences						
Treatment Group	17.53	17.14	12.70	-0.38	-4.44	-4.83
Control Group	27.16	18.42	29.82	-8.74	11.40	2.66
Difference	-9.63	-1.28	-17.13	8.36	-15.85	-7.49
Observations	178	146	120			
University						
Treatment Group	8.25	11.43	11.11	3.18	-0.32	2.86
Control Group	12.35	2.63	12.28	-9.71	9.65	-0.06
Difference	-4.10	8.80	-1.17	12.90	-9.97	2.93
Observations	178	146	120			

Note. Table shows the share of the firms that have collaborated with the listed education institution reported separately for each survey round (Columns 1-3) as well as the change in the shares from one survey round to another (Columns 4-6). The shares are reported separately for the firms in the treatment and control groups (Rows 1-2). Row 3 provides the

difference in the means for each round (Columns 1-3) and the difference-in-differences (Columns 4-6). *The survey question:* Which of the following education institutions have you collaborated with regarding staff competences or recruitment? If collaborated with the given education institution gets value 1, otherwise 0.

7.4 Growth Pact 3: digitalization and adoption of new technologies

In the register data analysis presented in Section 6.3, we were limited to use the information on firms' choice to invest in machinery, equipment, and buildings as a measure of digitalization and adoption of new technologies. Here we completed the analysis by measuring the attitudes towards providing training in the field of artificial intelligence and robotics.

According to the results reported in Table 15, the share of companies expecting to need training in artificial intelligence or robotics within the next two years goes down in both groups for both types of topics. The drop is larger in the firms of the treatment group than in the control group firms. In contrast, Table 16 shows that also the share of firms that are willing to spent working time to train their employees in the topics of artificial intelligence and robotics has decreased less in the treatment group than in the control group.

7.5 Summary

The analysis based on survey data suggests that the project service and incentive model had at best very modest impact on the attitudes and choices of the firms. The findings are particularly grim regarding the topics covered by Growth pact 1, recruiting and training new employees. For most of these outcomes, the development has been more favourable in the control group than in the treatment group. There are more positive signals of the effects of Growth pact 2 and 3, but the results are too mixed to draw conclusions about the impact of the project models.

The failure of the survey data to provide convincing evidence is not at all surprising given the sample sizes of the target group, treated firms, and responding firms. Moreover, there is some evidence showing that the selection into the survey changed during the project. These issues are a common challenge with survey data. However, the Covid-19 pandemic has likely exaggerated the problems.

8. Summary and conclusions

The Urban Growth Vantaa project looks for innovative solutions to boost employment, productivity, and growth in the Vantaa region. To achieve this, the project develops service and incentive models that focus on three different targets (Growth pacts 1-3): 1) enhancing recruitment and training new employees, 2) improving the skills, competences, and education level of employees, and 3) advancing technological change at firm level. This final report evaluates the effects of the project on outcome indicators measuring these targets of the project. The impact evaluation utilises a randomized trial and information from administrative registers and multi-round survey.

The numerical targets set for participation were clearly achieved. Total of 65 companies took part in the project services, which surpass the goal set in the project plan by 8 percent. A large share of the participating companies was involved in more than one growth pact, indicating high level of satisfaction among the treated companies. In line with prior literature, growing firms and firms that were making also other investments simultaneously were more likely to participate in the project services.

We do not find any systematic evidence that the Urban Growth Vantaa succeeded in its core targets and improved the growth potential of the firms or the local economy in general. There are some positive signals in particularly with respect to the targets of Growth pact 2. However, there are also many indicators where the development in the treatment firms is worse than in the control firms. The evidence is too ambiguous to draw any definite conclusions. The results are much more cohesive regarding the targets of Growth pact 1. For majority of the indicators, the firms in the treatment group are outperformed by the firms in the control group. Based on the impact evaluation, the project did not increase new recruitments. Finally, the evidence regarding Growth pact 3 is mixed.

There are several disadvantages and limitations to our analysis that may prevent the impact evaluation capturing any potential effects. In particular, due to the small number of target firms and treated firms the actual effect of the service and incentive models would have needed to be almost unrealistically large to be visible in the average statistics. The problem is further magnified when using the survey data. Although, the survey attracted a decent response rate, unfortunately, it was still too low for reliable inference.

On the other hand, the most reliable and extensive data, namely administrative registers, can take several years to be available for researchers, and thus, we were not able to observe all outcomes for the full project period. This is a substantial drawback. The innovative and developmental nature of the project meant that there was a great deal of learning that took place during the project, and thus, it is very likely that the quality and effectiveness of the project services improved towards the end of the project. Hence, missing this information for the latter stages of the project may lead to significantly underestimating the effects of the project.

Another crucial challenge for the impact evaluation is that companies have long-term strategies for their employment and production choices, and they do not alter these decisions lightly. Achieving changes in these fundamentals is a challenging and a long process. We have attempted to capture early signs of any improvements by including outcome indicators that measure the attitudes of the companies towards increasing the skills and competences of their employees or adopting new technologies. However, here again the data suffers more from the lack of statistical power to draw reliable conclusions.

Due to these challenges, the businesses and the Vantaa region may have experienced improvements, even when this analysis fails to detect them. A major lesson for any future development project must be to take into account also the requirements of an impact evaluation when planning the project. This is the only way to increase our understanding of what works.

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Appendix A: Survey (in Finnish)

YRITYSKYSELY

Hyvä yrityksen/toimipaikan edustaja,

Olet nyt vastaamassa Vantaan alueella toimiville yrityksille tehtävään ***kolmannen kierroksen*** kyselyyn. Saman tyyppinen kysely on lähetetty yrityksille jo kahdesti aikaisempina vuosina. Vastaattehan kyselyyn riippumatta siitä, oletteko vastanneet siihen jo edellisillä kierroksilla.

Kyselyssä on kysymyksiä työvoima- ja koulutustarpeisiin liittyvistä asioista. Vastaaminen kestää noin 5-10 minuuttia. Vastaukset ovat luottamuksellisia ja ne menevät vain tutkimuskäyttöön. Tietoja julkaistaan vain yhteenvetotietoina, joista ei voida tunnistaa vastaajaa.

1. **Yrityksen nimi:**

2. **Toimipaikan nimi (jos eri):**

3. **Toimipaikan katuosoite:**

4. **Vastaatteko yrityksen vai toimipaikan/yksikön näkökulmasta?**
   ☐ 1 Yritys ☐ 2 Toimipaikka/yksikkö

5. **Asemanne yrityksessä**
   ☐ 1 Yrityksen ylin johto
   ☐ 2 Toimipaikan/yksikön johto
   ☐ 3 Muu keskijohto/esimiestaso
   ☐ 4 Muu, mikä _____

6. **Osallistutteko rekrytointipäätöksiin?**
   ☐ 1 Usein ☐ 2 Joskus ☐ 3 En koskaan

7. **Arvionne yleisestä taloudellisesta tilanteesta Suomessa seuraavan 12 kk aikana**
   ☐ 1 Paranee ☐ 2 Säilyy ennallaan ☐ 3 Heikkenee ☐ 4 En osaa sanoa

8. **Yrityksenne/toimipaikkanne liiketoiminnan kasvunäkymät seuraavan 12 kk aikana**
   ☐ 1 Paranee ☐ 2 Säilyy ennallaan ☐ 3 Heikkenee ☐ 4 En osaa sanoa

9. Yrityksen/toimipaikkanne kasvuhalukkuus (liikevaihto ja henkilöstömäärä)

☐ 1 Tavoitteenamme on kasvaa ☐ 2 Pyrimme säilyttämään nykyisen aseman

☐ 3 Pyrimme pienentämään toimintaamme ☐ 4 En osaa sanoa

10. Kuinka koronakriisi on vaikuttanut yrityksenne rekrytointeihin ja henkilöstön koulutukseen? <u>Ympyröikää parhaiten sopiva vaihtoehto</u>

	Vähentynyt	Ei muutosta	Kasvanut	En osaa sanoa
a. Rekrytointien tarve on	1	2	3	4
b. Henkilöstön koulutuksen tarve on	1	2	3	4
c. Tarve rekrytoida erityisosaajia on	1	2	3	4
	Heikentyneet	Ei muutosta	Parantuneet	En osaa sanoa
d. Mahdollisuudet tehdä uusia rekrytointeja ovat	1	2	3	4
e. Mahdollisuudet kouluttaa henkilöstöä ovat	1	2	3	4
f. Mahdollisuudet tukea henkilöstön omaehtoista opiskelua ovat	1	2	3	4

11. Oletteko kuulleet aikaisemmin Urbaania kasvua - GSIP Vantaa hankkeesta?

☐ 1 En ole aikaisemmin kuullut hankkeesta ☐ 2 Olen kuullut hankkeesta

☐ 3 Yritykseni on osallistunut hankkeeseen ☐ 4 En osaa sanoa

12. Onko yrityksessänne ollut käytössä/käytössä nyt palkkatuki joidenkin työntekijöiden palkkauksen osana? <u>Voitte valita tarvittaessa useamman vaihtoehdon</u>

☐ 1 Ei ole käytetty/käytössä ☐ 2 Kyllä, osana oppisopimuskoulutusta

☐ 3 Kyllä, mutta ei osana oppisopimuskoulutusta ☐ 4 En osaa sanoa

13. Seuraavaksi esitetään joukko väittämiä henkilöstön osaamiseen ja rekrytointiin liittyen. <u>Ympyröikää parhaiten sopiva vaihtoehto</u>

	Täysin eri mieltä	Osin eri mieltä	Osin samaa mieltä	Täysin samaa mieltä	En osaa sanoa
a. Henkilöstön osaaminen on riittävällä tasolla	1	2	3	4	5
b. Joidenkin työntekijöiden osaaminen kaipaa päivitystä	1	2	3	4	5
c. Osa henkilöstöstä tarvitsee mittavaa uudelleen koulutusta	1	2	3	4	5
d. Uusille rekrytoinneille on tarvetta	1	2	3	4	5
e. Rekrytointi on helppoa	1	2	3	4	5
f. Henkilöstön osaamiseen on panostettu parin viimeisen vuoden aikana	1	2	3	4	5
g. Olemme rekrytoineet uusia työntekijöitä parin viimeisen vuoden aikana	1	2	3	4	5

14. Miten olette tukeneet henkilöstönne kouluttautumista? <u>Voitte valita tarvittaessa useamman vaihtoehdon</u>

☐ 1 Järjestänyt itse/hankkinut ulkopuolista koulutusta

☐ 2 Mahdollistanut osallistumisen koulutukseen työajalla

☐ 3 Tarjoamalla etenemismahdollisuuksia lisäosaamista hankkineille

☐ 4 Järjestämällä koulutusta työnantajan koulutusvähennyksen avulla

☐ 5 Tarjoamalla tietoa eri koulutusvaihtoehdoista

☐ 6 Mahdollistanut osallistumisen Urbaania kasvua - GSIP Vantaa hankkeen koulutukseen/valmennukseen

☐ 7 Jokin muuten, miten_____

15. Mitä seuraavista koulutusmuodoista tai -väylistä olette käyttäneet/käytätte toiminnassanne? Voitte valita tarvittaessa useamman vaihtoehdon

☐ 1 Oppisopimuskoulutus

☐ 2 Koulutussopimus

☐ 3 Opintoihin liittyvän harjoittelun/projektin/opinnäytetyön teettäminen

☐ 4 Työvoimakoulutus (esim. rekrytointikoulutus, täsmäkoulutus, muutoskoulutus)

☐ 5 Täydennyskoulutus ja räätälöity valmennus

☐ 6 Avoin AMK tai yliopisto

☐ 7 Erikoistumiskoulutus (AMK tai yliopisto)

☐ 8 Työntekijöiden opiskelu aikuiskoulutustuella

☐ 9 Koulutusseteli

☐ 10 Urbaania kasvua - GSIP Vantaa hanke

☐ 11 Jokin muu, mikä_____

16. Oletteko tehneet yhteistyötä seuraavien toimijoiden kanssa henkilöstön osaamiseen tai rekrytointiin liittyen? Voitte valita tarvittaessa useamman vaihtoehdon

☐ 1 TE-palvelut ☐ 2 Ammatilliset oppilaitokset ☐ 3 Ammattikorkeakoulut

☐ 4 Yliopistot ☐ 5 Kaupungin työllisyyspalvelut ☐ 6 Henkilöstön vuokrausyritykset

☐ 7 Urbaania kasvua - GSIP Vantaa hanke ☐ 8 Jokin muu, mikä_____

17. Mitkä ovat merkittäviä kasvuanne rajoittavia tekijöitä? Voitte valita tarvittaessa useamman vaihtoehdon

☐ 1 Tuotteilla/palveluilla ei ole riittävästi kysyntää

☐ 2 Alan kilpailu rajoittaa

☐ 3 Työntekijöiden heikko osaaminen

☐ 4 Työntekijöiden vääränlainen osaaminen

☐ 5 Sopivien osaajien rekrytointi vaikeaa

☐ 6 Rahoituksen puute

☐ 7 Epävarmuus oman toimialan tulevaisuudesta

☐ 8 Jokin muu, mikä _____

18. Mitkä ovat merkittäviä henkilöstönne kouluttamista rajoittavia tekijöitä? <u>Voitte valita tarvittaessa useamman vaihtoehdon</u>

☐ 1 Ei tarvetta koulutukselle

☐ 2 Ei tarjolla oikeanlaista koulutusta

☐ 3 Henkilöstö haluton osallistumaan

☐ 4 Liian kallista

☐ 5 Byrokratia liian työlästä

☐ 6 Kouluttaminen lisää riskiä avainhenkilöstön lähtemiseen

☐ 7 Ei tietoa koulutustarjonnasta

☐ 8 Jokin muu, mikä _____

19. Mitkä ovat merkittäviä uusien työntekijöiden rekrytoimista rajoittavia tekijöitä yrityksessänne/toimipaikassanne? <u>Voitte valita tarvittaessa useamman vaihtoehdon.</u>

☐ 1 Ei tarvetta

☐ 2 Ei tarjolla sopivia osaajia

☐ 3 Rekrytointi aikaa vievää/kallista

☐ 4 Työntekijän palkkaaminen kallista/riskialtista

☐ 5 Ei tietoa rekrytoinnin tueksi

☐ 6 Jokin muu, _____

20. Millä seuraavista tavoista voisitte jatkossa tukea henkilöstönne osaamisen kehittämistä? <u>Ympyröikää parhaiten sopiva vaihtoehto</u>

	Mahdollista jatkossa	Ei ole harkittu	Ei aikomusta
a. Järjestetään itse/hankitaan ulkopuolista koulutusta	1	2	3
b. Mahdollistetaan osallistuminen koulutukseen työajalla	1	2	3
c. Etenemismahdollisuuksia lisäosaamista hankkiville	1	2	3
d. Tarjotaan tietoa koulutusvaihtoehdoista	1	2	3
e. Jotenkin muuten, miten_____	1	2	3

21. Mitä seuraavista koulutusmuodoista voisitte olla valmiita jatkossa käyttämään? <u>Ympyröikää parhaiten sopiva vaihtoehto</u>

	Mahdollista jatkossa	Ei ole harkittu	Ei aikomusta
a. Oppisopimuskoulutus	1	2	3
b. Koulutussopimus	1	2	3
c. Opintoihin liittyvän harjoittelun tms. teettäminen	1	2	3
d. Työvoimakoulutus (esim. rekrytointikoulutus)	1	2	3
e. Täydennyskoulutus ja räätälöity valmennus	1	2	3
f. Avoin AMK tai yliopisto	1	2	3
g. Erikoistumiskoulutus (AMK tai yliopisto)	1	2	3
h. Aikuiskoulutustuki	1	2	3
i. Koulutusseteli	1	2	3
j. Urbaania kasvua - GSIP Vantaa hankkeen koulutus	1	2	3
k. Jokin muu, mikä_____	1	2	3

22. Kuinka pitkäkestoista työajalla tapahtuvaa koulutusta olisitte valmiita järjestämään yrityksessänne/toimipaikassanne alla olevista aiheista? <u>Ympyröikää parhaiten sopiva vaihtoehto</u>

	En lainkaan	Yhden päivän	2-5 päivää	2-4 viikkoa	Yli kuukauden
a. Tekoälyn mahdollisuudet	1	2	3	4	5
b. Robotiikan mahdollisuudet	1	2	3	4	5
c. Myynnin edistäminen	1	2	3	4	5
d. Markkinoinnin edistäminen	1	2	3	4	5
e. IT-osaaminen	1	2	3	4	5
f. Henkilöstön oppimaan oppiminen	1	2	3	4	5
g. Jokin muu, mikä_____	1	2	3	4	5

23. Millä aikavälillä näette yrityksenne/toimipaikkanne tarvitsevan koulutusta seuraavista aiheista? <u>Ympyröikää parhaiten sopiva vaihtoehto</u>

	Ei lainkaan	Seuraavan kuuden kuukauden sisällä	Vuoden sisällä	Kahden vuoden sisällä
a. Tekoälyn mahdollisuudet	1	2	3	4
b. Robotiikan mahdollisuudet	1	2	3	4
c. Myynnin edistäminen	1	2	3	4
d. Markkinoinnin edistäminen	1	2	3	4
e. IT-osaaminen	1	2	3	4
f. Henkilöstön oppimaan oppiminen	1	2	3	4
g. Jokin muu, mikä_____	1	2	3	4

<u>AVOIMIA KYSYMYKSIÄ:</u>

24. Mitä toiveita teillä on henkilöstön osaamiselle?

25. Mikä rajoittaa näiden toiveiden saavuttamista?

26. Mitä toiveita teillä on oppilaitosyhteistyöstä?

27. Mitä toiveita teillä on rekrytointiin liittyvästä yhteistyöstä kaupungin kanssa?

KIITOS OSALLISTUMISESTANNE KYSELYYN!

Appendix B: Survey answers to open-ended questions (in Finnish)

Round 1

22. Mitä toiveita teillä on henkilöstön osaamiselle?

- Jokaisella olisi mahdollisuus oppia uutta, mahdollistetaan ammatillinen kehitys/ osaaminen jatkuvalla ja pitkäjänteisellä koulutuksella - ammattilaisten tarpeiden mukaan.
- Motivoituneet työntekijät, jotka tekevät työnsä.
- Meidän alallamme henkilöstön tulee jatkuvasti kehittää osaamistaan, myös työajan ulkopuolella.
- IT-taidot kaikille,myynti ja markkinointi kaipaavat lisäkoulutusta jatkuvasti
- Ammatillista päivityskoulutusta
- Halua oppia uutta
- Asenne/työmotivoituminen
- Moniosaaminen pitäisi saada paremmalle tasolle. Työparin töiden osaaminen back up mielessä tärkeää.
- Alan peruskoulutu tai työkokemusta pitää olla alla, jotta voi toimia työssä. Suomenkielen taito olisi tärkeää palveluammatissa.
- Tarvitsemme osaavia rakennuskonekorjaajia ja teknisiä myyjiä
- Olemme tekninen asiantuntija organisaatio. Osaamisvaje: kommunikointi.
- Ei kaikkea kaikille --> erikoistumista.
- Asiakaspalveluosaminen Digi -//-
- Osaamistason kehittyminen samalla kun yritys kasvaa ja kehittyy.
- Työelämätaitojen oppiminen.
- Hyväksyä muutos, jaksaa innostua uusista asioista.
- Trukinajotaito, kommunikointivalmiudet, välttävä englannin kielen taito
- Lakisääteiset kuljetusalan koulutukset, kuljetusalan erityistaidot
- Meidän tulee olla alamme osaavin
- Ammatillinen koulutus heikkoa. Ammattikoulutuksen parantaminen
- sosiaali- ja terveysalan perustutkinto -suomen kielen riittävä taito
- alan erikoisosaaminen
- hyvät perushoitotaidot -muistisairaan hoitamisen osaaminen -taito nähdä kokonaisuuksia ja suunnitella omaa työtään sen pohjalta -IT-taidot
- johtaminen/leadership
- Henkilöstön määrää on kasvatettava
- Pystyvät vastaamaan ammatissaan niiden vaatimuksiin. Laadun säilyttäminen ja vastuullinen tekeminen
- jatkuva kouluttautuminen työn ohella
- Pitää olla halua
- Kansainvälisyys, moniosaaminen, itseoppiskelutaidot, halu oppia uutta
- Alan osamisvaatimus on niin laaja ja muutos niin nopeaa, että tärkeintä alkaa olla osata oppia, etsiä itse tietoa ja soveltaa sitä.
- Täsmätaitoja yrityksemme tarpeisiin
- Motivaation ja laadun lisääminen.
- Koulutusmahdollisuuksien järjestäminen.
- riippuu tehtävästä, monet työt eivät vaadi korkeaa koulutusta ammattitaitoisia kuljettajia

- käytettävät teknologiat muuttuvat koko ajan ja siksi olisi tärkeää että henkilöstö seuraa aktiivisesti kehitystä
- Ala on tekninen. Teknisen osaamisen lisäksi tarvitaan sosiaalisia ja ihmistaitoja sekä esimies ja johtamisosaamista
- Yksikön viitekehyksiin sopivat koulutukset. Motivaatio kouluttautua on erisuuri kuin kehittyä
- Meillä on osaava henkilöstö, mutta tietotekniikan high techissä päivittämistä, uudenlaista ajattelua toimintoihin.
- Itseopiskelu
- Ravintola-alan ammattitaito: Keittiö ja sali. Monitaitoisuus, sitoutuminen
- Monipuolista osaamista sekä kiinnostusta työhön ja asukkaisiin
- Laaja-alaista
- Oma-aloitteinen, suuri mielenkiinto työtä kohtaan, halu oppia uutta
- itseoppimisen halu
- Henkilöstön osaamisen tulisi ollaa kasvavaa ja kehittyvää sekä ajassa pysyvää ja modernia.
- Motivoitunut oppimaan ja ymmärrys siitä ettei ole valmis.
- Toivon henkilöstön oivaltavan jatkuvan oppimisen tärkeyden
- Koulutuksen tarjoajat: koulutustarjonnan ajantasaisuus muuttuvassa maailmassa
- Työntekijät ammattikoulutettuja.
- oppiminen halu, aktiivisuus
- Jatkuvan opiskelun tärkeys
- Ammatillinen osaaminen
- Osasta työntekijöistä vastuunotto/velvollisuudet.
- Tasapuolisuus, roolia tukeva oppiminen henkilökohtaisten intressien lisäksi.
- Jatkuva kehittyminen ja oma-aloitteellisuuteen kannustaminen
- Asenne ja koulutus
- Vaikeinta on löytää osaajia vaativiin huoltotehtäviin. Koulutusta laitteisiin ei voi saada muualta kuin tehtaalta ja se on kallista. Lisäksi henkilöintä edellytetään sisäistettyjä perustaitoja ja luovaa ongelmanratkaisukykyä.
- Työhön sitoutuminen ja ahkeruus
- Vanhat työntekijät pitäisi saada tälle vuosituhannelle
- Tuotemyynnistä palvelumyyntiin
- kielitaito
- Osaamisen tulee olla alallamme sellaista että se sisältää asentajan työn perusteet sekä uusinta tietoa, kuten sähköiset varajärjestelmät, automaatio
- Riittävän laaja-alainen kokemus
- Lähinnä halukkuutta osaamisen npäivittämiseen ja uuden oppimiseen ja koulutukseen osallistumiseen
- Kuljetuskaluston omatoiminen huolto (lampunvaihto ym), kylmä-/pakastetuotteiden jakelusta kokemusta
- itsensäkehittäminen, toimintatapojen tehostaminen, halu oppia uutta
- poikkitieteellisyys ja kaupallisuus
- asenne oltava myönteinen työntekemiselle -oma-aloitteisuutta, yhteistyökykyä, joustavuutta
- team työ, avoimuus
- jatkuva osaamisen päivittäminen, painopisteiden määrittely ja koulutuksen toteutus
- Ei välttämättä it-osaamista, mutta mahdollisuuksien ymmärtäminen
- pitää vain jatkaa henkilökunnan kannistusta koulutukseen

- ammattikoulutuksen parantaminen
- työt onnistuvat melko itsenäisesti, tietotaito on kattavaa, ongelmanratkaisu on oma-aloitteista
- ammatillisten työtehtövien osaaminen - oman osaamisen kehittäminen - ns. työntekijätaidot
- rak. ala
- Teknisen tausta, sähköt./elektorniikan osaaminen + hyvät atk-taidot + kielitaito: suomi ja englanti
- itseohjautuvuus
- koko toimitusketjun hahmottaminen
- Potilassuojaan liittyvän lainsäädännön osaaminen.
- Mielitaitoa min. ruotsi ja englanti + elintarviketeollisuuden ja niiden prosessien tuntemus
- tietojen ja taitojen jatkuva päivittäminen muuttuvassa maailmassa
- Hybridiauton, etenkin sähköauton asentajaosaaminen ja sen saaminen vaikeaa.
- Kiertotalouden, kestävän kehityksen, ja metalurgian kouluttautuminen.
- Jos olisi mahdollista saada jo melkein valmiita kuljettajia maanrakennus koneiden käyttöön.
- edulliset korttikoulutukset.
- LKV-tutkinto
- Meillä oppiminen tapahtuu useilla sisäisillä kursseilla sekä luokkahuone- että verkkokoulutksina. Henkilöstömme osaaminen on erinomaisella tasolla.
- Ei olw specifioitu
- Henkilöstön pitää pystyä kouluttautumaan muuttuvassa asiakasrajapinnassa.
- lisätä osaamista
- osaava myyntihenkistä porukka kun ymmärtää miksi yritys on olemassa, omatoimisuus
- Henkilöstön tulisi omaksua strategiamme ja opetella toimimaan sen mukaisesti. "Osaaminen" on tässä siis hyvin laaja kokonaisuus.

23. Mikä rajoittaa näiden toiveiden saavuttamista?
    - Tietoa koulutusten ohjelmista, mitä ja missä muodossa voi opiskella.
    - Kausiluonteinen työ. Kauden aikana miltei mahdoton järjestää koulutuksia, kun työtekijät kiinni projekteissa.
    - Korkea työllisyysaste
    - Liian vähän aikaa koulutuksille,kun työt pitää myös hoitaa. Työntekijöiden asenne.
    - Koulutuksen saatavuus
    - Muutosvastarinta
    - Yleinen halu suuntautua kone-alalle.
    - Ajankäyttö joskus haasteellista. Samoin työntekijöiden motivaatio tällaiseen ei aina riittävän korkealla.
    - Tällaisia henkilöitä ei ole työmarkkinoilta saatavissa. Koko alan ongelma!
    - Tekniselle alalle lähtökohtaisesti hakeutuu introvertit suorittajat.
    - Henkilökunnan kiinnostus samoista osaamisalueista.
    - Tiettyjen henkilöiden kohdalla toimintaympäristön vaateet ajat(ovat) kapasiteetin ohi.
    - Asenteiden muuttaminen ko asioiden suhteen
    - Ei hallittu muutosprosessi.
    - Ei tarpeeksi osaavaa henkilöstöä tarjolla
    - Joudumme palkkaamaan nuoria suoraan koulusta ja vie 2-3 vuotta ennen kuin heistä saadaan kasvatettua ammattilaisia
    - Koulutuksen puuttuminen oppilaitoksissa
    - työvoimapula -maahanmuuttajataustaiset työntekijät

- työvoimapula alalla
- kaikilla työntekijöillä ei ole kykyä/halua oppia esim. IT-taitoja -osaavasta työntekijöistä on huutava pula
- aika ja budjettiraamit
- Osaavan työnhakijan löytäminen
- Kiire, jatkuva kilpailu tilanne. Opitaan uusi työ, seuraavan urakan voittaa joku muu.
- rajallinen aika
- Motivaatio
- Ei varsinaisesti mikään, on vaan tehtävä työtä näiden asioiden eteen. Priorisointia se vaatii
- Yksilöiden vastaanottokyky
- Yhtiömme osaaminen on niin erikoista, että koulutusta ei löydy.
- Oppimis halukkuus.
- Ei ole tarjolla.
- Tiedon puute
- IT-alan osaajien rekrytointihaasteet.
- henkilöstön oma motivaatio tai sen puute. Aina ei löydy mielenkiintoa haastaa itseään uusien teknologioiden äärellä. Myös yleinen kiireinen työntekotahti vaikeuttaa oppimiseen paneutumista.
- Tiukkaa selvitä nykyisillä resursseilla
- Resurssipula, koulutustarjonnan suppeus, henkilökunnan tämän hetkinen epävarmuus
- Ehkä henkilöstön päivittäiset kiireet
- Henkilön motivaation puute
- toimiala on matalapalkka-ala. Palvelualan kiinnostavuus nuorten keskuudessa.
- Vähän ammattitaitoisia kokkeja tarjolla ja siksi vaihtuvuus suurta
- sisäinen halukkuus puuttuu nykypäivän ihmisistä. Halukkuus auttaa toista ihmistä
- Henkilöstön saatavuus
- Henkilöstöpula
- ei ole työmotivaatiota
- Työkuorma ja arki.
- Motivaation taso, työn mielekkyys ja henkilökohtainen arvostus.
- Aika, resurssit
- palveluntarjoajat (ks. edellinen)
- Ei rajoitteluita.
- ei mikään
- Kiire
- Välinpitämättömyys
- Tarjonnan puute erikoisalallamme
- kiire ja alalla yleisesti työntekijöiden heikko sitoutuminen
- Pula ko henkilöistä
- Ainoa asia, joka tuottaa erittäin hyvän tuloksen on pitkä työkokemus, koska opinnoilla ei voi oppia kaikkea.
- Ei saada rekrytoida henkilöitä joita olemme toivoneet
- Liian moni osa-alue vaatisi uudelleenkoulutusta vanhoille työntekijöille -> ei ole realistista saada koulutettua nykyaikaan
- Johtajien osaaminen, pitkä perinne muunlaisesta toiminnasta
- oikean henkilön löytäminen
- Sopivan räätälöidyn koulutuksen puute, sekä aika ja koulutuksen kalleus

- Tarjolla vähän oikean kokemuksen omaavia ihmisiä
- spesifinen ala johon vähän osaajia Suomessa
- Aika
- työntekijöiden vähäinen määrä markkinoilla
- kiire, vanhat toimintatavat
- kilpailu osaajista
- On vaikeaa löytää osaavaa henkilökuntaa tekniselle alalle. Sähkö- ja jäähdytystekniikan koulutus on perustasoista ja esim. sähkökäytön johtajuus (S1) on henkilökohtainen vastuu. Muutos lakiin tarvittaisiin.
- pitkä ura, osittian ehkä pelko työn säilyttämisestä joissain tapauksissa
- paljon asiaa, tehtävä valintoja
- Henkilöstön kiinnostus it-ym. asioihin - nyt humanisteja ja terveydenhoidon ammattilaisia
- aika ja koulutuksen ajankohdan osuminen mahdolliseen hetkeen
- monipuolinen ja -tasoinen ala
- asenneongelmat
- huoltoasentajien puute
- ei mitään
- Itseräätälöitävä ja toteutettava
- Erikoisalalle vaikeaa saada osaavaa henkilöstöä (elintarveteollisuuden btob)
- ihmisten muutoksen pelko ja haluttomuus
- Hybridiautojen asentamiseen tarvittavan osaamisen saaminen. Ei ole hybridiauton asentajia.
- Koulutuksen puute-
- todella vähän on ammattilaisia pääkaupunkiseudulla vapaana
- Kokeiden vähyys ja vaikeus
- Ei olw specifioitu
- Vanheneva henkilöstö.
- niukasti koulutuksia
- nykyihmisen ajatusmaailma
- Toiveita kenelle? Lisätietoja uralupaus.fi

24. Mitä toiveita teillä on oppilaitosyhteistyöstä?
    - Työnhakijoiden profiilien ylläpitäminen ajantasalla, mitä työtä etsivät, milloin voivat aloittaa, osaaminen ja kokemus.
    - Meillä on tällä hetkellä hyvä yhteistyöppilaitos, jonka kanssa on saatu asioita konkereettisesti eteenpäin.
    - Otamme mielelämme oppilaita työharjoitteluun.
    - Yrityksen kuuleminen työharjoitteluja suunniteltaessa
    - Oppilaitos on kartalla työelämän tarpeista -> koulutus osaa tarpeisiin
    - Aktiivisuus
    - Alan oppilaitoksista voisi olla enemmän aktiviteettia uusien potentiaalisten kuljettajien löytämiseksi kuljetusalalla.
    - Että hakijoista kerrottaisiin jo etukätwwn totuudenmukaisesti. Esimerkiksi osaamistasosta, kielitaidosta jne.
    - Haluaisimme kovasti tehdä, mutta meidän resurssimme eivät riitä yhteistyökumppaneiden aktiiviseen etsintään. Ollapa tarjontaa oppilaitoksista päin!
    - Olemme rekrytoineet AMK:sta 2 ja 3 vuosikurssin opiskelijoita. AMK:sta toivon aktiivista yhteydenpitoa ja yhteistyötä.
    - Tilanne nyt ok.

- Mielellämme teemme yhteistyötä mikäli se on toimintaamme sopivaa.
- Ei tarvetta
- Oppilaitokset saatava ottamaan yhteyksiä yrityksiin
- Olemme käyttäneet työharjoittelijoita kokemukset hyvästä ala-arvoiseen. Vähentää meidän puolelta halukkuutta jatkaa
- Aktiivinen yhteyshenkilö oppilaitoksessa. Henkilön on tunnettava yrityksemme erityistarpeet, jotta hän pystyy löytämään sopivat harjoittelijat / työssäoppijat
- -olemme Varian kanssa viritelleet yhteistyötä: lh-opiskelijoita tulee työssäoppimaan, oppisop. opiskelija tullut Variasta, ostamme jatkossa myös koulutusta henk.kunnalle sieltä (mm. kattava saattohoidon koulutus)
- Olen lähestynyt useita oppilaitoksia ja tarjonnut kesätyöpaikkoja, harjoittelupaikkoja, projektitehtäviä. Kukaan ei ole palannut aiheeseen.
- Jatkua samanlaisena
- Avoimuutta. Yritettiin kummi luokkaa Variaan, mutta ei olleet kiinnostuneita. Oppilaitosyhteistyötä sellaisten henkilöiden kanssa, jotka oikeasti ovat kiinnostuneet viemään asiat loppuun.
- toivoisin löytäväni helposti tietoa eri yhteistyö vaihtoehdoista
- Ei suoria toiveita
- En osaa toivoa enempää kui itä olemme Vnataan oppisopimuspalveluilta saaneet. Se yhteistyö, nopeus ja joustavuus ovat olleet yksi tärkeä tekijä siinä että olemme kasvaneet yhdeksän vuoden aikana 1,3 -> 6,2 M¬ liikevaihtoon ja palkanneet yli 30 uutta ihmistä.
- Sujunut hyvin tähän asti. Toivottavasti ei huonone.
- Olisivat aktiivisempuia työnantajiin päin.
- Yhteiset palaverit, jossa kartoitetaan tarpeet.
- Oppisopimuskoulutukselle suurin tarve
- ottakaa rohkeasti yhteyttä
- ammattiopistojen aktiivisuus yhteistyössä on ollut pettymys
- Pitäisi olla huomattavasti helpompaa TE-keskukseen ei saa edes yhteyttä
- Tiiviimpi & helpompi yhteistyö esim sijaisuuksien tekemisen suhteen. Päiväkodissa tarvitaan paljon keikkasijaisia ja varmasti alan opiskelijat olisivat kiinnostuneita tekemään töitä opiskelemallaan alalla.
- Tulkaa yrityksiin kertomaan lisä- täydennys- ja jatkokoulutusmahdollisuuksista. Räätälöikää koulutuksia
- Sujuvaa yhteistyötä, monipuolinen tarjonta, realistiset koulutusajat on erisuuri kuin -tavoitteet
- Otamme mielellämme harjoittelijoita. Lisää esim. nestekaasulaite ammattikoulutusta!
- Kuten nyt: harjoittelujen kautta kesätöihin ja sieltä osa-aikaiseksi opintojen ohella
- mielelläni ottaisin alan opiskelijoita työssäoppimis jaksoille, erityisesti keittiöön
- Valitkaa oikeita ihmisiä koulutuksiin
- Kontaktointi
- Oppilaitokset ovat yhteydessä minkälaisia ossaajia heiltä löytyy
- Keskusteluyhteys on, mutta koulutuksen tulisi olla ajanmukaisempaa.
- Erikoistöiden kautta molempien osapuolien hyötyä. Lopputöiden kautta uusia välineitä ja tekniikoita. Uutta henkilökuntaa.
- Apua ruuhkahuippuihin
- ks. edelliset
- Ei mitään.

- Kiinnostuneita ollaan. Esim. harjoitustöitä ollaan valmiita teettämään.
- Toimii jo tällä hetkellä
- Työmotivaatio ja halua oppia.
- yhteisprojekteja oppimisen merkeissä
- Opettajat voisivat olla yhteydessä
- kesätyöpaikkailmoitusten suora jakelu oppilaille
- Toimii jo nyt hyvin.
- Selkeitä ja järkihintaisia koulutuksia vanhalle henkilöstölle.
- Rohkeasti voi ottaa yhteyttä
- työpaikan pitäisi olla selvillä kun oppilas valmistuu
- se että harjoitteluun tuleville on opetettu ammatin perusteita sekä asennetta ja työelämän pelisääntöjä.
- Mahdollisimman selkeät tiedot yhteistyövaihtoehdoista.
- Toive olisi saada ammattikoulusta koneasentajaopiskelijoita harjoittelemaan ja kesätöihin. Varian kanssa on yritetty yhteistyötä, mutta huonosti: saimme harjoittelijan joka häipyi kahden viikon jälkeen. Opettajasta emme ole sen jälkeen kuulleet, vaikka hän piti työpaikkaamme postiviisena harj.paikka
- että oppilaitokset olisivat aloitteelisia
- Ei tällä hetkellä mitään.
- oppisopimuskoulutuksen mahdollisuus kuljetuslalle
- työnantajilla mahdollisuus tutustua jo koulitusvaiheessa opiskelijoihin ja rekrytoida.
- Enemmän tietoa oppisopimuksesta
- enemmän infoa
- ei toiveita
- toiminut hyvin, vakiintuneita kytäntöjä (yliopisto, ammattiopisto). Yhteydenpito myös harjoittelun aikana.
- harjoittelijoiden tulee olla "lähes" valmiita viimeisen uoden opiskelijoita
- oppilaitkosen henkilöstöllä selkeä kuva työelämän vaatimuksista, byrokratiaa vähemmän ja selkeämmin. Sopivia koulutettavia voisi tarjota ns. akanoina
- työntekijätaitojen painottaminen -asennekoulutus - hlön oma vastuu oman osaamisen kehittämisestä
- Voisimme käydä esittäytymässä ja kertomassa työskentelymahdollisuuksista meillä
- aktiivinen cv-tietojen saaminen, yhteydenotot hakijoilta
- hyvä yhteistyö TTS:n kanssa olemassa
- Jo useamman vuoden/kymmenen vuoden työkokemuksen omaamille ei oppilaitoksista helposti löydy riittävän tasokasta koulutusta
- Rekry-yhteistyö, osa-aikaiset työntekijät, työssäoppiminen, lopputyöt, opiskeluun liittyvät harjoittelut
- On toiminut jo taloushallinnon osalla hyvin
- enemmän aktiivisuutta yrityksiin päin
- Mennään oppisopimus ja koulutussopimuksella.
- Ei harkittu.
- saataisiin oikeasti hyviä,reippaita nuoria miehiä/naisia alalle.
- Meillä työntekijät ovat osallistuneet ammattitutkintojan suorittamiseen menestyksellisesti ja toivon sen jatkuvan.
- Ei taida onnistua
- Aktiivista yhteydenpoitoa

- toimii hyvin käytämiemme oppilaitosten kanssa
- oppilaitokset pitäisi ymmärtää yrityksien haasteet ja tarpeet
- Ei toiveita. Hoidamme itse.

25. Mitä toiveita teillä on rekrytointiin liittyvästä yhteistyöstä kaupungin kanssa?
    - Ei oikeastaan ole mahdollista alallamme.
    - Kaupungin pitäisi tulla yrityksiin esittelemään mitä mahdollisuuksia olisi olemassa ja miten yritykset voisivat niistä hyötyä. Konkreettisemmin jalkautua kentälle ja kääriä hihat!
    - Emme tiedä, kuinka kaupunki kuuluu rekrytointiin?
    - Paikallisten nuorten ja muuttajien asunnon saannissa voisi kunta auttaa jotenkin
    - Kaupunki kertoo aktiivisesti palveluista/mahdollisuuksista.
    - Aktiivisuus.
    - Mikä yhteistyö? Kyselyn tuloksia EI SAA käyttää markkinointi-yhteistyöhön 3. osapuolten kanssa.
    - Ei toiveita.
    - Suoraa yrityksen henkilöstöhallintoon kohdistuvaa tiedottamista asioiden tiimoilta. Kiitos!
    - Ei tarvetta, pystymme tarvittaessa kouluttamaan itse
    - Konkretista tukea (tietoa / kustannusapua) hyvien henkilöiden kouluttamiseen kuljetusalan lakisääteisille kursseille
    - Kaupungin tulisi kuunnella yrityksiä mitä tai minkälaista koulutusta tarvitaan
    - ei ole
    - Olemme usean vuoden jo käyttäneet oppisopimusta ja tämä sopii meille oikein hyvin. Muuta koulutusta ulkopuolelta ei nyt tarvetta.
    - -opiskelijoiden määrää tulisi nostaa aloilla, joissa on kova työvoimapula
    - Tukea ja vaihtoehtoja, tapaamisten fasilitointi
    - Odotamme, nyt koska todellinen yhteistyö on mahdollista.
    - Ei suoria toiveita
    - En usko tukiin koska ne vääristää sekä työntekijän, yrityksen että asiakkaan näkemystä oikeasta työnteosta ja oman palkan ansaitsemisen merkityksestä. Mutta nämä kyselyt, yhteydenpito sekä kaikenlainen kommunikointi sekä jousto & luottamus yritysten ja kunnan kesken on tärkeää.
    - Edullisia vuokra-asuntoja muualta tuleville uusille työntekijöille
    - Ei toiveita
    - Tiedon jakaminen
    - lisätietoa kaupungin työvoima palvelusta oli mielenkiintoista saada
    - rekrytointiapua tarpeeseen
    - Olemme yrittäneet toimia TE-keskuksen kanssa. Se on niin vaikeata ja byrokraattista, että olemme aina luovuttaneet ja maksaneet kulut itse. Emme lähde enään minkäänlaisiin kokeiluihin mukaan
    - tietoa mahdollisista tukipalveluista
    - Tämä kysely on hyvä alku, yritys - oppilaitokset - kaupunki. Kuinka hyödymme ja hyödytämme toistemme resursseja.
    - Ei erityisiä toiveita. Ammattikoulutusta laitehuoltoon, liuottamotekniikkaa, nestekaasulaitteistoihin - NYT EI KOULUTA KUKAAN!!Huoltamoverkostot rapistuvat, allalla vain muutama toimija ja valtavat markkinat
    - mielellään mukana, mutta kielimuuri usein esteenä
    - Eri tukimuotojen helppo löytäminen
    - Aktiivisempaa otetta

- Ei mitään. Rekrytointi tapahtuu oman alan sisällä, tarvitaan lääketieteen ja lääketurvan asiantuntijoita. Headhunterit käytössä.
- Toivotaan nuorten työllistämistä ja seteliä/palkkatukea ym. auttamaan ammattikoulutettujen nuorten työllistämisessä. Ammattikoulussa ei opita työtä vaan oppiminen alkaa töissä yrityksessä.
- "Ei tulis mieleen ottaa yhteyttä, vaan otetaan yhteyttä molliin ja rekryfirmoihin." "Pallo Vantaan kaupungille": kiinnostunut saamaan mahdollisimman konkreettisesti tietoa missä voi olla apuna ja esim. millä prosenteilla.
- Ei toiveita
- Mahdollisuus pienyrittäjälle vaikuttaa työnjatkuvuuteen.
- Rekrytointitapahtumat, muu välitys tai tuki toiminta.
- Meillä on väylä jota kautta pystymme tarjoamaan sadoille esim. Toisen asteen opiskelijoille arvokasta työkokemusta. Haluaisimme avata nämä väylät yhdessä kaupungin kanssa.
- Saisimme haluamamme henkilöt töihin
- Ei ole
- kuka on meidän yhteyshenkilö?
- Hakijoiden osaaminen ja soveltuminen tehtäviin olisi jo valmiiksi selvitetty.
- Ei mitään.
- koulutustarpeiden tarkempi kartoitus sekä koulutuspolkujen läpikäynti suunnitelmallisesti yritysten tarpeet huomoiden.
- infoa enemmän
- ei toiveita
- rekrykoulutusresursseihin selvät valintakriteerit työllistäjän kanssa
- Moni palkattava on tullut kaupungin palveluksesta: kaupunki ei asettaisi rajoitteita/esteitä/hankaloittaisi työn aloitusta
- Löytää sopivia osaajia rekrytointeihin
- Ei tällä hetkellä tarvita
- rekrytointimessujen järjestäminen kaupungin omissa tiloissa
- Maahanmuuttajia on pakko alkaa tuomaan. Ei löydy muuten osaajia.
- Ei harkittu.
- voisi olla enemmän yhteydessä, koska työtä riittää mutta ei oikeita tekijöitä missään.
- missä on ammattihenkilöt?
- Ei olw
- Aktiivista yhteydenpitoa
- erikoislalle on hyvin vaikea työllistää henkilöitä ilman asianmukaista koulutusta
- kaupunki valitettavasti ei ole hyvä brandi tässä asiassa

Round 2

24. Mitä toiveita teillä on henkilöstön osaamiselle?

- Riittävä peruskoulutus nykyaikaiselle lukkosepälle (sähkö, elektroniikka,data ja kädentaidot). Perustaitojen päälle voidaan rakentaa nykyvaatimusten mukainen osaaminen tai osaamisen yksityiskohdat.
- yleisesti tarpeeksi laaja tiettyihin erityistehtäviin muutamille henkilöille
- Jatkuva oppiminen. Moni osaaminen
- Ammattiosaaminen eritääin tärkeä
- Meidän alalla henkilöstö hyvin pitkälle itsenäisesti pitää huolen ammattitaitonsa ylläpitämisestä. Työnantaja sitten tukee tässä työntekijää.
- Jatkuva kehittyminen
- Valmiita peltiseppiä tai bitumieristäjiä ei tahdo löytyä markkinoilta.
- Hyvä yleisnäkemys suomalaisesta teollisuudesta ja mekaniikasta/voimansiirrosta yleensä.
- Innostuneisuus toimialaan ja yritykseen. Valmis kehittämään itseään työnohella.
- Otetaan osaaminen käyttöön
- Lähtee yrityksen tarpeista ja tukee strategiaa
- elintarvikealan koulutus puuttuu kokonaan. Liha-alalle ja leipomoalalle löytyy, mutta se ei auta meitä.
- taksinkuljettajien ammattipätevyys ja TaksiHelsingin ajolupa laatuvaatimuksineen
- Yli 50-v oppijoiden kouluttaminen aktiivisemmiksi itsensä esille tuojiksitarpeen
- Projektipäällikkökoulutusta ja työmaiden hallintaa
- Jatkuva oppiminen, pysyä oman alan kehityksen mukana
- Parempi peruskoulutus.
- kattava ammattikoulu koulutus.
- Pyritään monipuolistamaan henkilöstön osaamista
- Omaa aktiivisuutta
- Alan peruskoulutus
- Tulisi päivittää tämän päivän vaatimusten tasolle
- Että olisi mahdollisuus ja resursseja kouluttautumiselle ja henkilökunankehittämiselle
- Tarvitaan kykyä "oppia pois" vanhoista toimintatavoista sekä nähdä mahdollisuuksia uusissa toimintatavoissa. Koulutustarpeet hyvin liiketoimintalähtöisiä ja linkittyneet operatiiviseen arkeen - yleisillä koulutuksilla vaikea saavuttaa haluttuja lopputuloksia.
- aktiivinen ote ihmisillä itsellään oman kilpailukyvyn säilyttämiseksi
- Sitoutunut asenne ja aito kiinnostus luo edellytykset oppimiselle
- Hyvä ammatillinen sähkötyön ja elektroniikan osaaminen
- Sähköisten koneiden osaaminen
- Henkilöstö on osaavaa, hyvä asiakaspalvelu ja lisämyynti aina ok
- Koska siivousalalla on pääsäännöllisesti maahanmuuttajia töissä, niin alan koulutuksia olisi hyvä olla myös kurssimuotoisena enemmän tarjolla. Edullisia koulutuksia.
- Täysi luotto ammattitaitoon
- Myyntihenkilöitä on vaikea löytää. Toivomme henkilöstöltä oma-aloitteisuutta
- Tottakai osaava henkilökunta on arvokas voimavara yritykselle
- Motivaatio omaan työhön
- Innostusta jatkuvaan oppimiseen
- Kiinnostus kouluttautumista kohtaan olisi hienoa saada heräämään
- Laaja-alaisuus
- Yleisesti osaamisen päivittäminen

- Että se on vähintään ajantasalla, mieluummin suuntautunut tuleviin teknologioihin
- Ammattitaitoisia huolellisia kuljettajia
- Ajankohtaista koulutusta oman yrityksen hoidettavana jatkuvalla syötöllä
- Laajempi osaaminen on aina iso plussa, mutta siihen vaaditaan sitoutuminen sekä taloudelliset edellytykset. Uusia asioita tulisi tuoda esille
- FT erityisalueiden syventävät koulutukset
- AV-tekniikan koulutusta
- Kannatan aina osaamisen lisäämistä
- Perustieto alasta oltava
- IT osaaminen, alan uusien määräysten osaaminen
- Oman alan osaamista, kuten päivittyvät turvallisuusmääräykset ja tastekniikan automaatio
- Pitäisi opetella lisää palveluliiketoimintaa ja sen ympärillä tarvittaviataitoja
- Jatkuva ja systemaattinen osaamisen kehittäminen, todellisista tarpeistalähtien. Pidetään riittävä ammattitaito yllä
- Asentajista esimieheksi - nokkamieskoulutus. Ammattikoulun opetussisällönräätälöiminen paremmin + teräsrakenne
- Alakohtainen tuntemus, yleinen myyntityö
- Syvällinen toimialan tekninen osaaminen
- Motiivi
- Pyrimme rekrytoimaan osaavia henkilöitä. Koulutukset hoidamme pääsäännöllisesti sisäisesti
- Työtunnit/vuosi
- Kaikki kunnossa, ahkeria ja osaavia kuljettajia jonossa tarjolla covid19vuoksi
- Henkilöstön motivointi jatkuvaan oppimiseen ja itsensä kehittämiseen
- mahdollisimman kattavat sähköasennuksen / insinöörin perustaidot ja yleinen tuntuma erilaisiin koneisiin ja laitteisiin
- Parantaa asiakaspalvelua ja yhtenäistää sitä.
- Täsmäkoulutus alalle missä toimii
- Jatkuva oppiminen

25. Mikä rajoittaa näiden toiveiden saavuttamista?
    - sopivien tyyppien löytyminen.
    - Aika ja resurssit
    - Sähkö ja kylmälaitteiden osaajia hankala löytää
    - Kustannukset
    - Kiire ja jonkun verran joidenkin kohdalla motivaatio
    - ei kai mikään
    - Osalla ei kovin suurta intoa itsensä ja yrityksen kehittämiseen.
    - operatiivinen toiminta, kysyntä
    - Puuttuva koutulus.
    - Ei ole hakijoita.
    - Henkilöiden arkuus, vanhat tottumukset
    - Ei ole saatavilla tai on liian pitkiä
    - Koulutuksien puute
    - Keskiasteen koulutuksen tila on surkea.
    - nykyiset nuoret oppilaat eivät osaa käyttäytyä työelämässä.
    - Aika ja työntekijöiden motivaatio.
    - Oma aktiivisuus

- Yrityksen ylin johto ei ole valmis kouluttamaan henkilöstöä sillä tavallamitä tarvittaisiin.
- Erittäin huono koulutuksen taso alan kouluissa ja henkilömateriaali
- Aikapula ja resurssit
- Haastava tlanne kaupan alalla Koronan takai
- Operatiivisen toiminnan ja liiketoimintaympäristön tuntevia lisäarvoa tuovia koulutuksia/kouluttajia rajallisesti tarjolla.
- aika, ja onneksi väistymässä oleva kulttuuri
- Ks. edellinen
- Ei mikään - vaikea löytää hyvää, motivoitunutta henkilökuntaa
- Alalle ei ole tunkua
- Kiinnostuksen puute nykyisillä. Kannustinloukut potentiaalisille.
- Kielitaidon puuute. Koulutukset suomenkielellä. Suurinosa ei puhu/ymmärrähyvin suomea.
- Ajan puute
- Korona on heikentänyt mahdollisuuksia
- Osaavan henkilöstön löytäminen
- Pitkät työsuhteet -> lähestyvä eläkeikä
- Työnantajan puolelta tarjotaan o-tukea/tietoa = ei lainkaan
- Oikean koulutuksen löytyminen. Rahoitus.
- Olemme aina kannustaneet työntekijöitä opiskelemaan ja järjestämme itsekin koulutuksia esim. 4 kertaa vuodesssa koko talolle pidettävän seminaarin kautta. Kaikki ei aina tykkää. Hlökkunta "marisee" helposti. Rahaa ei valitettavasti ole suureellisiin, ulkopuolisiin koulutuksiin ainakaan usein.
- Raha
- Mistä löytyy?
- Aika/tekijä
- Epävarma taloudellinen (lähi)tulevaisuus. Miten covid-19 vaikuttaa seuraavan vuoden kehitykseen?
- Tällä hetkellä koronan tuoma epävarmuus kaikessa tulevaisuudessa
- Vain vähän koulutuspaikkoja/opiskelijoita. Ei tarjontaa
- Työthetävät, pieni organisaatio, vaikea olla pois työtehtävistä. Kustannus
- Rajallisesti hakijoita
- Ikärakenne, muutosvastarinta, kiire
- Sopivan hintainen räätälöity koulutustarjonta
- Sopiva koulutus
- Vain ja ainoastaan kausityö ja sen tuomat ajankäyttöhaasteet
- Resurssit
- Aika
- Nykyisessä suhdannetilanteessa ei mahdollista rekrytoida nuorta henkilöstöä, jolle hiljaista tietoa voisi siirtää vanhalta 45 vuoden aikaikkunassa eläköityvältä henkilöstöltä
- Suomessa kustannus/tehty tunti
- Laiton liikenne ja rikolliset yhtiöt sekä laiska, osaamaton valvonta estää rehellisten yhtiöiden kasvua
- Työkuorma ja ajan puute
- työntekijöillä on harvoin pysyvää laatua oleva halu oppia uutta, varsinkin jos se edellyttää pitkäjänteistä ja vaikeaa opettelua
- Koko henkilöstöä ei voida sitoa koulutukseen yhtäaikaa, jotta asiakaspalvelu ei häiriinny. * Ajan puute * Kustannukset

- Ehkä motivaatio tai koulutuksen saatavuus

26. Mitä toiveita teillä on oppilaitosyhteistyöstä?
    - ei erityistä toivetta
    - Kohtaa yrityksen tarpeet ja johtaa henkilöstön aitoon osaamisen kehittymiseen.
    - En osaa näin spontaanisti sanoa tarkemmin
    - Teemme jo nyt yhteistyötä lukuisten yliopistojen ja korkeakoulujen kanssa
    - Opinnot tukisivat konkreettista työtä ja toisivat parannusta yrityksemmetoimintaan.
    - rekrytointiin/työllistymiseen johtava väylä ansiokkaille/sopiville opiskelijoille - suositusten kautta, toive:)
    - Olemme avoimia kokeilemaan uutta
    - Meille soveltuvia verkkokursseja joita voi suorittaa työ ohessa
    - Olisi mukava saada toimimaan ammattikouluyhteistyö. Olemme yrittäneet Vantaan kanssa parin vuoden ajan. Lupaukset ovat aina hienot, mutta toteutuminen ihan tyhjän kanssa. Yritin kirjoittaa tarkemmin, mutta kentän merkit loppuivat. Saa kysyä lisää, jos kiinnostaa.
    - Räätälöidä koulutuksia yritysten tarpeiden mukaan
    - Parempi teoria opetus koululla.
    - lisää työelämä-taito opetusta.
    - Firman esittely ja uramahdollisuudet opiskelijoille, työharjoittelumahdollisuudet
    - Ei soveliasta koulutusta tarjolla toimialallemme.
    - Lisää tiedottamista
    - On hullua että täysin kysyvvömiä päästetään läpi koulusta
    - Enemmän infoa työnantajille
    - Vois ehkä ollan aktiivisemmin yhteydessä eri kaupan alan yrityksiin jos tulossa esim harjoittelujaksoja ym.
    - Ei tällä hetkellä toiveita.
    - meillä on ensisijaisesti tarvetta jo työkokemusta alalta omaaville henkilöille
    - Mahd. kesätyön tarpeessa jos tarvetta tulee (varasto)
    - Ei kokemusta
    - Oppisopimusmallia lisättävä ja kehitettävä. Toimii meillä hyvin.
    - Meillä nyt hyvä yhteistyö Careeria/Varian kanssa.
    - Ei ole
    - Tarjoamme mielellään harjoittelupaikan ja sen jälkeen mahdolllisesti työpaikan. Tämä on ollut hyväksi havaittu käytäntö
    - Ei erityisiä, sujuu hyvin jo nyt, tukea valtiolta koska vaatii meiltä resursseja toteuttaa
    - Että saamme tulevaisuudessa osaavaa henkilöstöä, jolla on ennen kaikkea oikea, innostunut asenne ja halu oppia
    - Aktiivista toimintaa ja yksilöiden opastusta
    - Ei toiveita/odotuksia
    - Laurea-yhteistyö aikanaaan lopahti
    - Joustavuus, kevyt byrokratia
    - Yhteistyötä ei käytännössä ole. Miten sitä kehitetään?
    - Ei mahdollista
    - Ehkä vähän haastavaa löytää aihe/ohjaajaa
    - Oppilaitokset voisivat olla enemmän aktiivisia
    - Aktiivista yhteydenpidon. Excursioita. Työpaikkojen välitystä.
    - Joustava koulutusohjelma. Urbaani kasvu hankkeessa oli hyviä juttuja missä sai osallistua (muutama tunti)

- Oppilaitoksissa tulee opettaa valmistuville asentajille työn perusteet riittävällä tasolla. Tilanne on mennyt huonompaan suuntaan viime vuosina.
- Haluaisin lisää tietoa mikä on mahdollista + tietoa mitä meitä hyödyttävää he opettavat oppilailleen
- Meillä on tällä hetkellä hyvä kumppani oppilaitosyhteisössä, se toimii hyvin
- Mahdollisuus vaikuttaa opetussisältöihin. Aktiivisempaa yhteydenpitoa
- Tämä on potentiaalinen rekrytointikanava. Olisi hyvä että tätä kautta rekrytoimavalla paria ensimmäisen kk palkan maksuun osallistuisi myös oppilaitos
- Saksan maili
- enemmän yhteistyötä oppilaitosten ja yritysten välillä
- Motivoituneita harjoittelijoita ja lopputyöntekijöitä,joilla kunnianhimoaja osaamista työskentelyyn.
- otetaan vastaan vinkit välkyistä työ- ja oppimishaluisista nuorista, jotka ovat kiinnostuneet teollisuussähköasennustöistä
- Urbaania kasvua hanke oli todella hyvä ja opettavainen. Meillä se keskittyi marraskuussa esimiesvalmennukseen. Olisi hienoa saada jatkaa samantapaista hanketta myös jatkossa.
- Hyviä

27. Mitä toiveita teillä on rekrytointiin liittyvästä yhteistyöstä kaupungin kanssa?
    - ei erityistä toivetta
    - Tukea jatkuvaa oppimista ja kehittää henkilöstön moniosaamista panostamalla rahallisesti yhtiön koulutusohjelmiin
    - En osaa näin spontaanisti sanoa tarkemmin
    - Avoimin mielin :)
    - Yritysten kokonaisvaltainen myönteinen huomiointi muissa tarpeissa (esimpihatilaongelmat). Kun saamme kasvatettua toimintaamme kalustoresurssoinnin (piha) kautta kasvaa automaattisesti myös tarve rekrytoida henkilökuntaa lisää. Etelä-Suomi on yhä kasvavaa markkina-aluetta jos ei muita rajoitteit
    - Kaupunki kustantaa / tukee taksinkuljettajien koulutusta.
    - Palkkatukitoiminta kiinnostaa erityisesti asiakaspalvelutoiminnassa
    - Kaupungin tulisi jalkautua yrityksiin etsimään työpaikkoja
    - Mainostusta (meillä pyörii eri kanavilla omia rekrymainoksia) rekrytoinnista esimerkiksi
    - Sopivien osaajien tarjontaa kohdennetusti tai kysymällä jostain sovitustainstanssista (TE, oppilaitokset)
    - Ei toiveita. Hoidetaan itse.
    - Ei ole nyt toiveita
    - EI ole
    - Enemmän infoa työnantajille
    - Joku yhteinen kanava jonka kautta olisi helppo tavoittaa nuoria opiskelijoita jos/kun olisi tarvetta esim. osa-aikaisille työntekijöille / ekstroille.
    - Mielellämme kuulemme mitä tukea on mahdollista saada esim. taloudellisesti rekrytointiin - meillä on tiettyjä rekrytointitarpeita ja tämä voisi osaltaan tukea rekrytointien toteutusta.
    - TE-toimiston kanssa yhteistyö on toiminut hyvin, meille toimivin kumppani
    - Ehkä forumi jossa voisi esitellä työpaikkaa, jolta alasta kiinnostunut, aidosti kiinnostuneet osaavat hakea
    - Oppilaitos yhteistyö suoremmaksi.
    - Ei tarve

- Nuorten työllistäminen / Petra-projektin kanssa teemme paljon yhteistyötä. Työkokeilujen kautta työllistäminen
- Aktiivista tukea
- Ei toiveita/odotuksia
- En tunne tätä palvelua -> ei toiveita
- Nopeus kevyt byrokratia
- Ei
- Meillä pääsäännöllisesti myynnin ja markkinoinnin ammattilaisia alalla joten meillä yleensä konsultin avustuksella
- Rekrytointi on mennyt sellaiseksi, että työnhakijat ovat aivan piilossa työnantajilta. Ennen oli löytyvillä ihmiset nimillä, nyt kaikki on niin tietosuojattua, että hakija saa halutessaan olla ikuisesti piilossa. Kerrassaan raivostuttavaa!
- Tietoa koulutuksesta ja muista vastaavista palveluista
- Että se toimisi ja saisi hyviä henkilöitä. Meillä oli tammi-helmikuu paikka auki TE-toimisto ei löytänyt - sitten otettiin palvelu ja 2 viikossa oli 2 palkattu!
- Ei ole tällä hetkellä tarpeita / toiveita
- Olisi hyvä että kaupunki ei sosiaalietuuksillaan kilpailisi työvoimasta työmarkkinoiden kanssa
- Kertokaa miten voitte auttaa tällä hetkellä konkreettisesti
- Hyvä yhteistyö kaikkien potentiaalisten kumppaneiden kanssa on aina tervetullutta - Huom! Jos tätä kautta on mahdollisuus saada oikeita tekijöitä meille
- Aktiivisuus
- Vantaan Sitran rekrytointi
- En osaa sanoa. Voimme ehkä tarjota työssäoppispaikkoja asiantuntijoille tulevaisuudessa.
- ei me taideta suoraan tarvita kaupunkia mihinkään. koittakaa järjestää nuoret kouluun niin me firmat otetaan ne sieltä toisesta päästä ulos

Round 3

24. Mitä toiveita teillä on henkilöstön osaamiselle?

- Tehtävät opitaan töissä ja tälle pitää olla avoin suhtautuminen javalmius.
- Hyvä osaaminen asiakkaitten hankkeita ajatellen.
- Johtamisosaaminen, metallurgian ja siihen liittyvän lämpökäsittelynteorian syvällinen osaaminen ja teorian soveltaminen käytäntöön.
- halukkuus
- Ei erityistoiveita tällä hetkellä.
- Että henkilöstö jatkaisi yhtä innokkaasti opiskelua/ halua opiskella.
- Alan osaamistarpeet muuttuvat jatkuvasti tekniikan ja lainsäädännönmuuttuessa
- Peruskoulutus tulisi olla laadukasta. Omatoimisuus tärkeää työpaikan tarjonnan lisäksi
- Henkilöstön tulee pitää osaamisensa ajantasalla.
- Innokkuutta ja motivaatiota henkilöstöltä itseltään kehittyä ja oppia uutta.
- Halutaan monipuolistaa henkilöstön nykyistä osaamista. Tehdä työntekijöistä enemmän moniosaajia, kun toimitaan suorittavassa portaassa.
- Projektipäälliköiden työmaan johtaminen. Sähköasentajille ja teleasentajille ammattitaito yleensä.
- Enemmän tarkkuutta ja tekemisen meininkiä työn teossa.
- *Kansainvälinen asiakas-/myyntityö *Projektointiosaaminen asiakasrajapinnassa *CAD suunnittelu ja simulointi **Valmistustekninen osaaminen *Ongelmanratkaisuosaaminen *Johtamisosaaminen
- H Ammattitaitoisen nuoremman henkilöstön löytyminen.
- Myynti- ja asiakaspalveluosaaminen
- teknologian kehittymisen vauhdissa pysyminen, riittävän laaja osaaminen
- Ammattillinen osaaminen ja jatkuvan parantamisen kyvykkyydet.
- Microsoft Office ohjelmat, Teamsin käyttö, alan osaaminen
- erikoiskaupan laajan kysynnän hallitseminen
- Oppimaan oppiminen
- Itsenäistä havainnoivaa työotetta.
- perusvälkkyjä, hyvämuistisia ja terveesti uteliaita, nokkelia, työtehtävissä itseohjautuvia ja ennenkaikkea työhaluisia nuoria
- Ylläpitää korkea osaaminen.
- Ammattikoulutuksen räätälöintiä.
- Tarvutsenne monipuolista osaamista.
- Ammattimaisuus.
- "Maalaisjärki"
- Motivaatio.
- Oikea asenne työntekoon!
- Tekninen tausta, sairaalaelektroniikka.
- Suurin osa henkilöstöstämme on yliopistokoulutettuja eli tämä puolikunnossa. Ammatilliselle puolelle olisi osaamisen tarvetta.
- Täytyisi osata perusasiat myynnille sekä terveydenhuollon peruskoulutus. Toisaalta myös markkinointi & terveydenhuollon markkinat tärkeä osa-alue.
- OK
- Haluamme varmistaa koulutuksilla, että meillä on kehittymishaluinenja korkeatasoinen henkilöstö.
- Uusien ohjelmien käyttö (IT)

- Koulutus ylipäätään on hyväksi --> lisää 'omaa pääomaa' ja motivoi
- Fyysiseen työhön osallistuminen
- Kuormat ehjänä perillä ja vähemmän kolareita. Kaluston siistinä pito.
- Toimialaosaaminen, alan parhaat osaajat
- Omaehtoinen uteliaisuus tutkia asioita ja ilmiöitä korostuu
- Pitää olla itse aktiivinen ja oma-aloitteinen kehittämään omaa osaamistaan!
- Me tarvittaisiin teollisuuden sähköasennusta ja automaatiota hallitsevia asentajia
- Luotetteva, oma-aloitteinen, ei kännykkä riippuvainen
- Englannin osaaminen on välttämätöntä kaikissa yrityksen tehtävissä(nyk. selvästi puutteita) Excelit yms perusohjelmistot pitää osata
- Aurinkosähkö ja alilataus
- Ennemmin lisää työkohtaista osaamista kuin yleistä tietoa
- Että henkilöt itsekin miettisivät mitä osaamista tarvitsevat työssään. Ei ole vain esimiesten hommaa miettiä sitä.
- Digitaalisen viestinnän tehostaminen
- Kokemus
- Amk-koulutusta omaavia puuttuu meidän aloilta

25. Mikä rajoittaa näiden toiveiden saavuttamista?
    - Yleensä ei mikään.
    - Alalle ei ole varsinaista koulutusta kuin yliopistoissa. Näin ollenammattilaiseksi kehittyminen vie vuosia ja ihmisten sitouttaminen pitkäjänteiseen kouluttautumiseen työn ohessa on haastavaa.
    - halukkuutta
    - Ei erityistoiveita tällä hetkellä.
    - Jos motivaatio katoaa
    - Oppilaitokset ovat jatkuvasti useita vuosia jäljessä tekniikan ja lainsäädännön suhteen.
    - Aikapula, resurssipula
    - Usein aktiivinen projektityö siirtää koulutuksia tulevaisuuteen.
    - Juuri tuo, mitä edellisessä mainitsin.
    - Yrittäjän aika ja työntekijöiden motivaatio
    - Ei ole sopivia koulutuksia
    - Asennetta työtä kohtaan voi aina kehittää paremmaksi.
    - Sopivien henkilöiden löytäminen.
    - vaatimuksista.
    - Sopivan henkilöstön puute ja haluttomuus osallistua koulutuksiin
    - aikataulupaineet
    - Henkilöiden koulutustausta ja sitoutuminen.
    - Osittain kiire
    - oikeanlaisen työvoiman saatavuus
    - Jää liian vähän työaikaa kouluttamiseen
    - Puutarha- ja vähittäiskauppa-alalle ei ole tarjolla sopivaa opetussuunnitelmaa. Opetus ei ole nykyaikaisen tarpeen mukaista tai edistä alan toimivuutta.
    - niitä ei tahdo kaupungeissa heidän omien rientojensa vuoksi olla,paitsi jos todella harrastaa meidän alaa. Siis rakkausesta lajiin asenteella.
    - Pieni organisaatio mistä vaikea irrottaa tekijät.
    - Koulutusjärjestelmä.
    - Konsernin rekrytointipolitiikka.

- Ajan puute.
- Avuttomuus, laiskuus, haluttomuus, helppouden haku.
- Motivaatio.
- Kulttuuri on rapautunut. Verotus ei kannusta tienaamaan.
- Vähän hakijoita.
- Oikean tyyppinen koulutus.
- Kuinka tavoittaa myyntihenkiset hoitajat.
- Ei mikään
- Sopivien koulutusten löytäminen ja niiden toteutuksen aikataulujensopiminen omaan aikatauluumme.
- Muutosvastarinta, ikä
- Kate --> tuntuu, että kaikilla on niin paljon töitä ja siksi moni haluaisi mielummin skipata koulutuksia kuin osallistua niihin.
- Osittain asenne ja työvoiman aika iso vaihtuvuus ja vuokratyövoimantarve.
- Työpaine rajoittaa koulutusmahdollisuuksia
- Tuntuu, ettei tuollaisia kouluteta Etelä-suomessa
- Pula tekijöistä
- Alhainen koulutustaso alalla
- Oikeanlainen koulutus
- Koulutuksen löytäminen
- Ihmiset
- Osaavan henkilön puuttuminen ja haaste löytää koulutettu osaaja
- Henkilöiden löytäminen
- Vähän koulutettuja ja halukkaita

26. Mitä toiveita teillä on oppilaitosyhteistyöstä?
    - Ei sovellu meille.
    - Hyvien harjoittelijoiden löytäminen.
    - enemmän tarjonta
    - Ei toiveita tällä hetkellä.
    - Aktiivisempaa yhteydenpitoa oppilaitoksen suunnalta yrityksiin
    - Enemmän tietoa mahdollisuuksista työnantajille
    - Joustavuus. Yrityksen ja henkilöiden tarpeisiin sopiva koulutus. Ajantasainen tieto.
    - Toiminut hyvin (harjoittelijat)
    - Pitäisi toimia muutenkin, kuin kalvoilla neuvottelupöydässä. Käytännössä tarjoutuminen harjoittelupaikaksi ei ole johtanut mihinkään Vantaan kanssa. Haaga Helian kanssa onnistui oppisoimuskoulutuskin.
    - Toivomme mahdollisuuksia päästä esittelemään yritystä ja osaamistaopiskelijoille. Voisimme tarjota opinnäytetyö- ja harjoittelumahdollisuuksia sekä tietysti työpaikkoja.
    - Meillä on kohtuullisen tiivis yhteistyö Varian kanssa ja se toimii
    - Käytännössä ei mitään. Oppilaitokset eivät tarjoa meidän alalle hyödyllistä täydennyskoulutusta. Koulutetaan yrityksessä sisäisesti
    - Sopivia työharjoittelijoita ja meidän alalle sopivaa koulutusta
    - Kanavat tulisi saada auki HRK HR vs. oppilaitos
    - Koulutuksien ja kurssien linkittäminen liike-elämän tarpeisiin.
    - Oppilaitosyhteistyö on meille hyvin vierasta, mutta mikäli alasta kiinnostuneita oppilaita on, niin olemme valmiina myös omalta osaltamme tekemään työtä sen eteen että saamme osaavia nuoria alalle.

- Rekrytointiyhteistyö
- ohjelmistokehittäjien lisäsaatavuus
- Koulutusohjelmien räätälöinti yhdessä teollisuusyritysten kanssa jaenemmän käytännön harjoittelua.
- Kun haetaan työssäoppimispaikkaa taloushallinnon alueelta, olisi hyvä että oppilas tosiaan osaisi vähän enemmän ko asioista kuin tällä hetkellä.
- toiminut hyvin
- Tällä hetkellä ei tietoa
- Mahdollisimman yksinkertaista toteuttaa, joustavasti sovittavaa jamuuttuvaa. Minimaalisesti byrokratiaa ja paperitöitä.
- Jos soveliaita edelliset vaatimukset täyttäviä loytyy, niin voihanniitä meille vinkkailla
- Lyhyitä tehokursseja.
- Toiminut ok harjoittelijoiden osalta.
- Traineen kautta saisi hyviä työntekijöitä. Oppilastöitä joka tukisimyyntiä.
- Koulut voisivat kartoittaa vapaita harjoittelupaikkoja.
- Oppisopimus.
- Tärkeä, esim. kokkeja vaikea saada ja tämä voisi olla ratkaisu.
- Yhteistyö on ollut aina hyvää.
- Ei mikään
- Joustavuutta.
- Toimiva/jatkuva yhteistyö yrityksen tarpeista lähtien.
- Laadukkaita opiskelijoita, jotka voisimme jatkossa ottaa meille töihin.
- Aktiivista yhteistyötä, tietoa puolin ja toisin. Uusia osaajia kesätöiden ja opinnäytetöiden kautta.
- Tiiviimpiä kumppanuussopimuksia yhteistyöhön
- Oppilaitokset voisi tarjota hyviä taimia suoraan sopiville yrityksille
- Hyviä harjoittelukavereita tarvitaan
- Saisivat olla suoraan yhteydessä ja kertoa mitä heillä on tarjota.
- Työpaikka valmiina kun aloitetaan opiskelu

27. Mitä toiveita teillä on rekrytointiin liittyvästä yhteistyöstä kaupungin kanssa?
    - Ei tarvetta.
    - Voimme auttaa kaupunkia rekrytointiin liittyvissä tarpeissa.
    - kannusta nuoria tekemään töitä.vähentää sosiaali edut
    - Ei toiveita tällä hetkellä.
    - Toivon että otetaan yhteyttä rekrytointi tilaisuuksista
    - Enemmän tietoa mahdollisuuksista työnantajille
    - Ei toiveita
    - En osaa sanoa.
    - Ei toiveita. Ei käytetä.
    - Syvempää yhteistyötä oppilaitosten kanssa.
    - Päästä valmistuvien oppilaiden työnantajaksi.
    - Palveluiden esittely ja aktiivinen markkinointi yrityksille.
    - Kaupunki voisi tukea rahallisesti yrityksiä, joissa panostetaan oppilaiden ja työelämän yhdistämiseen ja koulutuksen kehittämiseen.
    - Rekrytointiyhteistyö
    - Ei ole kokemusta, niin en tiedä esittää toiveitakaan..
    - en osaa sanoa

- Tällä hetkellä ei tietoa
- Tukea ja joustavuutta.
- TE-toimiston palvelut eivät toimi, toivottavasti kaupunki voisi tuottaa oikeita henkilöitä kun heitä tarvitaan.
- Meillä on henkilö Vihdistä koulutussopimuksella.
- Ei toiveita.
- Rekrytointi työvoimatoimiston mol.fi kautta toimii.
- Ei kaupungilla ole mitään annettavaa tänä päivänä. Pitäisi keskittyä perusasioihin ja tähdätä kunnallisveroa pienemmäksi.
- Ei mitään
- Kaupunki voi tukea työnantajia rekrytointilisällä jatkossakin.
- Ei ole.
- Toivon, että kaupunki kertoo produktiivisesti missä he voivat auttaa.
- Kaupungin kartoitus mitä yritykset tarvitsevat 1-5 vuoden aikan