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Digital Working

‘Digital Working’ Policy Plan – Supercharge digital infrastructure, flexible working arrangements and educational opportunity.[1]

The ‘Digital Working’ policy plan proposes a tripartite approach to supercharging growth and to alleviate infrastructural difficulties in ‘left behind’ Britain.

- **Digital skills – Education vouchers for training courses from accredited institutions and private course providers.**
    - In order to increase growth, it is crucial to enable citizens to receive horizontal training opportunities to meet changing demands of the employment market. Giving them the opportunity to complete short vocational courses in digital skills from private-sector course providers (i.e. coding schools etc.) would address the global long-term trend of having to retrain workers in order to adapt to technological change. In order to promote respect for regional specificities over top-down approaches, educational vouchers would enable and empower workers to maximise their individual potential. Further, it is imperative to reduce the red tape and bureaucratic hindrances in the application process. Subsidizing mid-career vocational digital education in private-sector programs can supercharge growth in ‘left-behind Britain’, and promote an entrepreneurial mindset in the future-oriented digital sector.
    - Concretely, a pilot-scheme for 6 months in 5 select ‘left-behind’ communities with well-established digital connectivity links would be established in order to observe economic and social impacts of the program, as well as the theorized trickle-down effects into local economies. This would progressively be rolled out more broadly into key socioeconomically weaker de-industrialised areas.
- **Digital infrastructure – Develop quick and efficient digital infrastructure.**
    - Internet access is crucial for accessing vocational digital short courses. In line with the current political agenda, the government should pursue developing fast rural broadband, in particular by expanding the eligibility criteria of the Gigabit Broadband Voucher Scheme, linking it to participation in a digital skills short course.
- **Digital regulation – Relaxed flexible working regulation.**
    - Flexible working regulation has to be unilaterally relaxed in order to incorporate increasingly flexible individual circumstances and living contexts. Remote working has experienced a heavy increase during the pandemic and is likely to play a significant part in the modern workplace. Remote working in rural areas can further promote redistributive effects, that sees remote workers spend wages locally that were earned for companies situated in urban cities, in turn revitalizing local economies and high streets.

Context

Growth in Tech

Rapid technological change has been a continuous disruptive threat in the job market, with the COVID-19 pandemic further exacerbating this trend. Concretely, in 2021, the e-commerce and digital content freelancing sector are experiencing the fastest growth in the UK.[2] Whilst the pandemic has exacerbated the need for e-commerce personnel to meet rising demand in online shopping, the digital content freelancing sector has grown in reaction to uncertainties in the traditional jobs market.[3] In start-ups, the

[1] Many thanks to Dr. Steve Davies, Head of Education at the IEA, for his verbal feedback in a virtual call following my first-round submission that have helped guide further work on my proposal.
[2] McKeever, V. (2021) “LinkedIn says these are the fastest growing job sectors in the UK.”, CNBC, 21 January, https://www.cnbc.com/2021/01/21/linkedin-says-these-are-the-fastest-growing-job-sectors-in-the-uk.html [acc. 03.05.2021]
[3] Ibid.

UK's fastest growing sectors in 2020 include digital security, crypto-currencies and FinTech.[4] Further growth sectors such as social media and digital marketing, customer service, e-learning and artificial intelligence[5] also largely rely on digital skills that can be acquired via retraining at varying speeds. The British economy is therefore currently set in a context of technological change, which encourages productivity growth, allowing firms to offer services at lower prices, pay higher wages and stimulate consumption demand.[6] However, in order to benefit from these trends, technological advancements demand a workforce that is able to adapt.

Retraining

Research further predicts that by 2025, half of all employees worldwide will need reskilling in order to accommodate technological change.[7] 40% will require reskilling of only six months or less.[8] Technology use, monitoring and control, as well as design and programming are predicted to emerge in the top 10 skills required by 2025.[9] The same report estimates that 1-2 months are needed to retrain sales, marketing and content writing skills, with 2-3 months needed for the areas of product development, data and AI.[10] Lastly, 4-5 months are estimated to be the required time to learn cloud computing and engineering skills.[11] Overall, the key takeaway is that digital skills are a) in high demand, and b) quick to acquire. Further, expert research considers midcareer job training to be essential, with the future job market likely to challenge current educational and workforce training models, as well as traditional commercial internal retraining and skill-building scheme.[12] Digital skills a therefore c) long-term growth oriented. These three conditions render a growth strategy focused on enabling digital upskilling highly fruitful.

Regional focus[13]

There is a marked productivity gap across regions, as for instance in 2016, the value added per worker was 13% lower in the North than the UK average, and 25% lower than the South.[14] Past policy approaches in addressing regional economic imbalances have often relied on a top-down logic that largely ignored these divergences. As part of that the 'Northern Powerhouse' strategy for instance, the government identified 4 key impediments to productivity in the North: infrastructural connectivity, skills, enterprise and innovation, as well as investment.[15] This is linked to the key debate in regional economic policy between demand- and supply-side problems: Are there regional imbalances in the availability of employment opportunities or in the qualifications of unemployed workers?

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[4] Skingle, H. (2021) "The 6 Fastest Growing Sectors of 2020.", Beauhurst Blog, 06 January, https://www.beauhurst.com/blog/fastest-growing-sectors/ [acc. 03.05.2021]

[5] McKeever, V. (2021) "LinkedIn says these are the fastest growing job sectors in the UK.", CNBC, 21 January, https://www.cnbc.com/2021/01/21/linkedin-says-these-are-the-fastest-growing-job-sectors-in-the-uk.html [acc. 03.05.2021]

[6] McKinsey Global Institute (December 2017) "Jobs lost, jobs gained: workforce transitions in a time of automation.", p.4

[7] World Economic Forum (2016) "The Future of Jobs: Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution.", https://reports.weforum.org/future-of-jobs-2016/employment-trends/ [acc. 03.05.2021]

[8] Ibid.

[9] Ibid.

[10] Ibid.

[11] Ibid.

[12] McKinsey Global Institute (2017) "Jobs lost, jobs gained: workforce transitions in a time of automation.", p.3

[13] It is crucial to note that there is an inherent flaw in programmes that have previously aimed to tackle 'left-behind' Britain, as there is widespread academic scepticism over whether there exists a set of common factors that cogently links these individual towns together (cf.UK in a Changing Europe (2021) "Comfortable Leavers: The Expectations and Hopes of the Overlooked Brexit Voters.", https://ukandeu.ac.uk/wp-content/uploads/2021/04/Comfortable-Leavers-1.pdf [acc.03.05.2021]). For the purposes of this proposal, 'left-behind Britain' will denominate specifically socioeconomically weaker regions in England.

[14] HM Treasury (2016) "Northern Powerhouse strategy.", p.7, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/571562/NPH_strategy_web.pdf [acc. 03.05.2021]

[15] Ibid.

This approach presents a double-edged solution in addressing both demand- and supply-side issues, in enabling the labour force to up-skill and to find employment anywhere in the UK. Further, the key objective of this proposal is to promote mid-career upskilling. As education has been shown to boost creativity, inviting innovation and entrepreneurial capacities,[16] these opportunities would encourage long-term enterprise and innovation in 'left-behind' areas, inciting local investment.

Moreover, focus group research in these regions have shown that Britain's 'left-behind' areas primarily want increased jobs and training opportunities for young people who did not attend university with, as well as support for low-paid adults to gain new skills.[17] Further, the results have shown a desire to nurture local businesses and to revive high streets.[18] All four of these will be directly or indirectly be affected by the Digital Working Programme, as upskilling enables workers to get jobs in key growth industries previously barred to them, in turn incentivizing local consumption and inciting local productivity growth.

Overall, this proposal is aware of the risks of disregarding regional specificity, and therefore approaches regional development from a bottom-up rather than top-down approach: in empowering the individual worker, and in supporting them to receive educational opportunities in key growth sectors.

Geographical redistribution

It is important to elaborate on geographical redistributive effects. Remote employment in the digital sector for firms located in the larger urban centers such as Manchester and London raise the income of workers situated in 'left-behind' regions, and incentivizes spending in those local communities and high streets. There is therefore a market-oriented geographical redistribution effect associated with remote working, that can allow for productivity to be raised in remote jobs in urban centres, whose earnings in turn are spent in socio-economically weaker regions, that in turn boost local businesses and local economies. Remote working allows policymakers to bypass the bottleneck of inadequate infrastructural links and enables workers to contribute to growth industries from virtually anywhere. There are but a mere few preconditions to realize this growth potential, which this proposal seeks to promote.

Digital skills.

In supercharging growth, it is crucial to consider how to set effective individual and societal incentives for growth. One of the ways to do this is by providing adequate training opportunities that build modern skills required in an ever-changing employment market. Whilst the importance of digital skills in the modern workforce has grown, horizontal training opportunities remain limited.

Concretely, this would see the state subsidizing participation and accreditation costs of private-sector educational courses in the digital sector via 'digital learning vouchers', as part of online coding schools for instance. These costs are often low if compared to accreditation as part of the educational levels system in the UK, whilst still allowing for a thorough education that is sought after by businesses of all sizes.

We have seen similar examples of education vouchers for short training courses in Singapore and Germany. The Singaporean Government has also established a 12-week Tech Immersion and Placement Programme, based on a public-private partnership with the coding school General Assembly, equipping workers without prior tech experience with the skills need to transition into tech-oriented careers.[19]

[16] World Economic Forum (2016) "Global Competitiveness Report 2015-2016.", http://reports.weforum.org/global-competitiveness-report-2015-2016/education/#view/fn-53 [acc. 03.05.2021]
[17] Bounds, A. (2019) "What the UK's 'left-behind' areas want after Brexit.", Financial Times, 16 July, https://www.ft.com/content/89bff8c8-95dd-11e9-9573-ee5cbb98ed36 [acc. 03. 05. 2021]
[18] Ibid.
[19] https://www.imda.gov.sg/imtalent/programmes/tipp [acc. 03.05.2021]

Another example is the German 'Bildungsgutschein'.[20] In order to receive one, you however need a consultation with an administrator from a job centre, and there is generally a fair amount of paperwork involved. The solution proposed herein is more direct, with an easy and straightforward online application system. This allows mid-career professionals and workers to easily retrain for jobs in future-oriented growth sectors, directly addressing the rising demand for skilled workers in the technology and administration sector.

Currently, only limited governmental support exists for adult retraining. There is some case-by-case redundancy-related retraining support, as well as an Adult Learning Grant that however only supports new level of qualifications,[21] excluding both equivalent level qualifications as well as qualifications that are outside of the scope of the educational level system, as are most private-sector tech qualifications. This grant further only applies to full-time courses, is dependent on financial circumstances of the household and pays merely up to £30 per week.[22] Lastly, there is the professional and career development loan that can support job-related learning, if conducted with an organisation listed on the official CDL register of learning providers,[23] once more excluding many online private-sector providers, such as coding schools etc. The loan itself is administered by local banks and must be repaid one month after end of the course.[24] This proposal seeks to go beyond the strict conditionality of governmental policies to support adult learning. Rather, due to the limited geographical scope of this programme, as it would be offered directly in socioeconomically weaker regions. Further, given the low-costs of these private-sector programmes, a liberalised application environment can reduce scepticism and social barriers for worker to apply.

With no comparable data from the UK available, 2021 research in Germany shows that IT and automation are particularly attractive to mid-career retrained workers and career jumpers.[25] This provides ample indication of how attractive this offer would be to affected workers.

There is marked link between vocational education and this proposal, as the policies discussed would contribute to decentralising vocational education in the digital sector in 'left-behind Britain'. Much of the governmental assessment of apprenticeships for instance has been subject to criticism in the past, as insufficient data has been collected relating to the economic impact of apprenticeships, with unclear parameters as to what would constitute and measure success and impactfulness.[26] In order to get a grip on the financial implications of this proposal, a test-run is proposed over a 6-months period, in order to assess the social and economic effects of the policy. This must go hand-in-hand with clear key performance indicators, measurements and parameters. Such a pilot scheme would initially roll-out in 5 suitable communities in order to observe both the effectiveness of the acquired education in the job search, the social impact on the motivations of workers and the spill-over effects into local consumption on high streets etc. The lack of existing public data prevents concrete assumptions of the return numbers that we may see. However, it has been suggested that the return on governmental investment in apprenticeships is £26-£28 per £1 invested,[27] providing a ballpark figure of the growth that is to be expected.

[20] https://www.arbeitsagentur.de/bildungsgutschein [acc. 03.05.2021]
[21] http://www.redundancyexpert.co.uk/government-grants-for-retraining.html [acc. 03.05.2021]
[22] Ibid.
[23] Ibid.
[24] Ibid.
[25] Backovic, L. (2021) "IT, Automatisierung, Beratung: Diese Jobs sind für Quereinsteiger jetzt besonders attraktiv.", Handelsblatt, 28 April, https://app.handelsblatt.com/karriere/berufliche-neuqualifizierung-it-automatisierung-beratung-diese-jobs-sind-fuer-quereinsteiger-jetzt-besonders-attraktiv/27131816.html [acc. 03.05.2021]
[26] cf. National Audit Office (2019) "The apprenticeships programme.", https://www.nao.org.uk/wp-content/uploads/2019/03/The-apprenticeships-programme.pdf [acc. 03.05.2021]
[27] Talbot, D. (2021) "Where's the data? Does the UK really know why apprenticeships matter to the economy and people?", FE News, 28 April, https://www.fenews.co.uk/featured-article/67390-where-s-the-data-does-the-uk-really-know-why-apprenticeships-matter-to-the-economy-and-people [acc. 03.05.2021]

This proposal is also politically feasible. The 2021 Skills for Jobs White Paper has promoted employment-centred education and technical skills in economic growth.[28] Further, Skills Bootcamps form a part of this initiative, with flexible courses of 12-16 weeks providing adults with the opportunity to build sector-specific skills, in addition to an interview with a local employer.[29] Paired with a Lifelong Loan Entitlement, there is tentative development towards the liberalization of remote working and digital skills education.[30] As part of the Plan for Jobs by the DWP, the Sector-Based Work Academy Programme (SWAP) also offers up to six weeks of training and sector-specific work experience, and a job interview.[31] Between April 2020 and February 2021, 40,000 people have already completed a SWAP and have initiated a path to a new career. The following financial year seeks to double that number to 80,000.[32] Overall, whilst these policy initiatives are set in the stringent educational levels framework and do not hold the herein proposed regional focus or consideration for remote working, they do provide ample evidence for significant political momentum in valuing digital vocational work and mid-career training, that could also see this proposal come to fruition.

Overall, rather than providing subsidies to employers to retrain employees, as conventionally established, this proposal seeks to subsidize individuals to maximize their potential. Enhancing mid-career education improves worker's human capital, increases the productivity of the tech sector nationally and incentivizes local growth through expenditure and consumption. Subsidizing mid-career vocational digital education in private-sector programs aligns the interests of employers, employees and local stakeholders alike.

Digital infrastructure.

The last two components buttress the proposed move to digital mid-career retraining. Firstly, generally, broadband access in a modern digital economy is a crucial public good. Adequate connectivity is imperative to ensure successful implementation of this proposal. However, in socioeconomically weaker regions, such is often not a given. In 2018, the average broadband speed in rural areas was 34 Mbit/s, compared to 53 Mbit/s in urban areas.[33]

The political agenda has seen digital infrastructure expansion rise to the top in recent years. In 2019 already, political leaders had called for improved speed in rolling out full fibre broadband across the country.[34] Whilst the ambitious plan of setting 2025 as a deadline to aim for maximum full-fibre coverage is set to fail,[35] it is evident that connectivity is a pivotal priority in regional policy, with the 2020 budget seeing a governmental commitment to invest £5bn to roll out full-fibre broadband across the UK.[36]

[28] cf. Department for Education (2021) "Skills for Jobs: Lifelong Learning for Opportunity and Growth.", https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/957856/Skills_for_jobs_lifelong_learning_for_opportunity_and_growth__web_version_.pdf [acc. 03.05.2021]
[29] Ibid.
[30] Ibid.
[31] Davies, M. (2021) "Putting skills at the heart of our Plan for Jobs - Exclusive with Mims Davies.", FE News, 25 February, https://www.fenews.co.uk/featured-article/63852-putting-skills-at-the-heart-of-our-plan-for-jobs-exclusive-with-mims-davies [acc. 03.05.2021]
[32] Ibid.
[33] Department for Environment, Food and Rural Affairs (2019) "Broadband.", https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/787740/Broadband_March_2019__2018_data_.pdf [acc.03.05.2021]
[34] Afifi-Sabet, K. (2021) "Boris Johnson's 2025 gigabit broadband vision in tatters, MPs claim.", IT Pro, 08 January, https://www.itpro.co.uk/infrastructure/network-internet/358265/boris-johnsons-2025-gigabit-broadband-vision-in-tatters-mps [acc. 03.05.2021]
[35] Ibid.
[36] https://www.gov.uk/guidance/building-digital-uk [acc. 03.05.2021]

Currently, particularly rural areas are eligible for faster broadband via the Gigabit Broadband Voucher Scheme,[37] which involves a complicated process, as multiple households in the neighbourhood need to team up and apply. In effect, this policy encourages private providers to expand services into rural areas. This proposal would seek to link eligibility criteria of the broadband voucher scheme to the reception of a 'digital learning voucher', with broadband access subsidized for the mere duration of training. This would therefore see entire communities be eligible for application, as well as single connections, which is a shift from what is currently established. The pilot scheme would accordingly be applied in rural areas that are comparatively well-connected in order to be able to commence swiftly.

A lack of adequate digital infrastructure endangers the feasibility of this plan. Internet access is a crucial component of a well-connected region or city and must therefore be a focus in implementing digital working strategies in 'left behind' Britain.

Digital regulation.

Before the coronavirus, there already has been a steady increase in remote working, with many companies around Europe moving to more flexible working models. With the travel restrictions and social distancing measures imposed as part of the COVID-19 mitigation strategy, remote working has only intensified during the pandemic, with many having to work from home.

Whilst it may seem plausible that productivity may suffer from working outside of an office environment, research has found no significant difference in productivity in remote working as opposed to office working.[38] Only 1 in 4 believe that productivity may be negatively impacted when working from home. These findings indicate that employees increasingly value flexible workplace models and depending on individual circumstance and context may increase employee satisfaction. Especially the digital sector may profit significantly from flexible working patterns, with the digital industry often relying less on office infrastructure than others.

The current legislation around flexible working is fairly rigid. Outside of a pandemic, all employees currently have the legal right to request flexible and remote working by submitting a statutory application. They must have been working for their employer for at least 26 weeks in order to be eligible.[39] Employers are currently at the longer end of the stick – they are within their rights to refuse an application if they can, as it is vaguely formulated, 'a good business reason'[40] to do so. Relaxed legal infrastructure to support flexible work arrangements is necessary to accommodate for individual circumstance, empowering stakeholders and jobseekers to maximise their potential.

Further, a regional focus on digital skills as proposed herein can aid the state temporarily circumvent the infrastructural gap in commuting infrastructure, whilst still incentivizing economic growth. The focus on remote working is crucial to the implementation of this policy.

Conclusion

In summary, a lack of consideration for local and regional needs and specificities have rendered past growth strategies to produce inequal effects across different regions. Economic development must be tackled with a local and regional focus, with local stakeholders given the tools to maximise their potential. Making access to educational training opportunities dependent on geographical living circumstance may be associated with these principles. This policy proposal incentivizes growth by providing training opportunities for digital working, accompanied by the required digital and legal

[37] Department for Digital, Culture, Media & Sport (2021) "Government launches new £5bn 'Project Gigabit'", https://www.gov.uk/government/news/government-launches-new-5bn-project-gigabit [acc. 03.05.2021]
[38] https://www2.deloitte.com/ch/en/pages/human-capital/articles/how-covid-19-contributes-to-a-long-term-boost-in-remote-working.html [acc. 03.05.2021]
[39] https://www.gov.uk/flexible-working [acc. 03.05.2021]
[40] https://www.gov.uk/flexible-working [acc. 03.05.2021]

infrastructure. It promises both short-term and long-term significant growth as well as significant returns on governmental investment, whilst endeavouring to give regions a leg-up that need it the most. This cost-effective plan will improve skills to achieve inclusive growth, drive innovation in high-value growth sectors and have tangible positive trickle-down effects into local economies and high streets 'left behind' regions. It will encourage an entrepreneurial mindset, reduce barriers to entry into the job market and advance the needs of urban employers and rural employees alike.

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