Levelling-up through economic growth (a business strategy for the regions)

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ABSTRACT This paper presents a case for the Government's levelling-up commitment being the most crucial post-Covid recovery issue for the next decade. It suggests that the commitment should be addressed through a process of regionally-based business development grounded in a clearly defined UK growth model derived from current developments in innovation and growth theory. The second half of the paper exemplifies a series of contributions required of public sector institutions to secure this agenda and argues that Government vision and leadership are essential to its success.

1. Introduction

In his speech to the Conservative Party conference last year the PM affirmed his intention 'to spread opportunity more

widely and fairly’ and this was reiterated in the Conservative manifesto that referred to ‘levelling-up every part of the UK, investing in our great towns and cities, as well as rural and coastal areas’.

Since the general election the PM has repeatedly acknowledged his commitment to levelling-up the regions with particular reference to Brexit and Covid-19. Under the heading ‘Levelling up’ the March 2020 Budget asserts the need to ‘raise productivity and growth in all nations and regions for everyone, addressing disparities in economic and social outcomes’. The Integrated Review prioritises ‘levelling up opportunity and doing more to share the benefits of economic growth across the UK’, so too the white paper ‘Build Back Better: our plan for growth’. The Freeport bidding process that is underway also references levelling-up although it is not specifically targeted at areas outside London and the South East.

This is a hugely challenging time politically and economically, nevertheless, it is a time of cultural change when values are being challenged. It is a time when an inclusive vision for the regions could be seriously addressed. If levelling-up is to become a reality it has to be more than a tag applied to any initiative applicable to the regions. A properly articulated strategy is urgently required for consultation or the moment will have past.

In this short paper I shall consider the purpose of levelling-up and suggest some of the key features required in any serious programme designed to address the issue.

2. The challenge of levelling-up

Revisiting an established settlement will always pose severe difficulties in the face of opposition from those who may regard themselves as being on the losing side and it would be delusional to assume that some would not see themselves in this light. It is important therefore to be clear about the purpose, viability and the fairness of any new settlement. A process of consultation would inform public views and help clarify Government policy on these three key issues.

It is worth considering the concept of levelling-up in terms of current socio-economic challenges facing the country and the regions: the narrowing of employment opportunities in the regions that often fail to fit the skill sets, interests and monetary ambitions of regional communities compared to London and the South East; the consequent exodus of talent from the regions leaving behind increasingly vulnerable communities; and the stagnant regional economies that require regular, and often resented support, from the national exchequer.

As UK manufacturing halved in the late twentieth and early twenty first centuries (GVA) the UK's strong economic performance relative to other European countries lay with the financial services industry located mainly in London and the South East (Gudgin & Coutts 2015[1]). In terms of the current distribution of national prosperity, a recent House of Commons briefing paper[2] presents the GDP per head for the devolved administrations and English regions. The astonishing fact emerges that London's value is £54,700; the South East £34,100; and the remainder are all below the national average, mainly in the range £30,100 to £25,900 with the exception of the North East £23,600 & Wales £23,900. It is a crude but

interesting comparison.

These factors suggest the potential benefits of rebalancing in favour of regional economies. Options include business development from within the regions, appropriate national relocations and some reshoring of production to improve resilience against external shocks and reduce the carbon footprint of freight transport. This requires innovation in product design and production methods affording consumer value and productivity improvements to compensate for the UK's relatively high cost economy.

Apart from the extremely wealthy, London too presents immense problems for many of its inhabitants. The housing crisis is borne of a concentration of employment driving intense demand for accommodation compounded by the shortage of viable sites, a restrictive spatial planning system and political inertia. It is also worth considering the cost of continuing to develop the already congested and expensive London infrastructure.

The City, media presence, plethora of major cultural venues, senior law courts, a host of vastly resourced academic institutions, Whitehall and Parliament together constitute a vast centralised and powerful lobby for the status quo. Demands for improvements in quality of life for ordinary people find their way into the margins of political agendas but the real answer requires a full scale rebalancing of economic and social realities within the country.

In his thought-provoking paper 'Brexit and the British growth model'[3] Christopher Bickerton traces the breakdown of the British socio-economic compact and asserts the need for a new social settlement in Britain. The current Government could be

seen to adopt a similar view.

The March 2021 budget makes reference to levelling-up when it itemises infrastructure spending of £650bn up to 2024-5 for roads, railways, communications, schools, hospitals and power networks across the UK. Other recent announcements instance existing grant schemes and may ultimately extend them. A close-ended capital expenditure commitment could suit Treasury spending controls but a clear diagnosis and well-articulated recovery path is surely needed before scarce resources are deployed in a rush to limit the analysis and identify the feasible.

Levelling-up may be a long term project but this does not mean that the manner of its creation is unimportant, quite the opposite.

3. Innovation, productivity and growth

Innovation and growth theory has a history stretching back for more than 70 years but its research and impact on public policy has not been a dominant feature across the world as could have been expected in a period of technological change, financial crisis and the more recent drive for renewable energy and a reduced carbon footprint. As major new businesses have emerged in the USA over the past two decades, particularly in the digital technology and bio-engineering sectors, Europe has seen a less revolutionary experience with Germany successfully doubling down on engineering while the UK, having produced a multitude of innovative start-ups, has

seen them quickly sold off, often to companies in the USA. In effect, the USA's pro-business culture has been the stand-out innovative winner with hardly a shot being fired by its business rivals.

It could be said that there is a need for some consolidation of theory and greater rationality of thinking by governments when developing their business promotion agendas. Instead, considering the UK specifically, the Government's business agenda has tended to cover all bases but none of them particularly well or structured in a manner designed to learn from experience.

In her thesis[4] for the Adam Smith Business School of Glasgow University Nasira Bradley reviews the literature and starts to subject innovation and growth theory to rigorous statistical analysis. This raises the prospect of a more consolidated theory of business development and productivity and offers a potentially pivotal contribution to UK Government business development policy in the context of the levelling-up commitment and the UK's post-Covid economic recovery.

General drivers of innovation Bradley tests the various theoretical drivers of innovation for efficacy against business turnover applying multiple regression analysis and using the EU Community Innovation Survey (based on the OECD Oslo Manual definitions[5]). This leads to some interesting distinctions between primary and secondary drivers and firms of various sizes, maturity and ownership. Primary drivers related to firm size are identified: (i) small firms gain from skilled human capital and university contact; (ii) medium sized firms gain from the factors in (i) and contact with government research establishments (see comments on Germany below); and (iii) larger firms gain from the factors in (i),

from public funding and co-development with suppliers. Skilled labour and university contact prove effective drivers throughout these various business segments. It could be said that they provide the basics of modern business development. R&D investment is identified as a secondary driver.

Technology Gudgin & Coutts 2015 state plainly that R&D spending is essential to the development of science-based sectors including pharmaceuticals, aerospace and electronics and observe that the UK has the OECD's only recorded long-term decline in business R&D as a percentage of GDP.

Jones[6] points to the critical role that government-led innovation investment has had on the development of major technology-based industries in the UK, USA and elsewhere. Mazzacuto[7] reflects on the huge impact of US Government entrepreneurship, particularly the DARPA Programme, in supporting research that brings together multi-agency personnel to research and develop innovative applications that would probably prove discouraging to the more risk averse venture capital market. She notes the tepid approach evidenced by UK Government in this field and advocates a more adventurous spirit if the UK is to gain a footing in new areas offering the prospect of commercial dominance. The recent Government Bill[8] to 'create a high risk, high reward research agency' (ARIA) is intended to 'push boundaries in search of new discoveries' and could be seen as response to this challenge.

Christensen[9] lays emphasis on the insights that founders bring to young innovative businesses, often using existing technologies that the firm rapidly develops once the market provides good use for the innovative offering. This could explain Bradley's finding that R&D is a secondary driver of

innovation, placing the entrepreneur as the instigator with R&D investment improving the potential of innovative commercial applications.

Perhaps Christensen offers the more common case whereas innovation based on advanced science should be seen as a special case that applies in some fields on some occasions. Electronics and digital technology are certainly represented in both approaches.

A recent Policy Exchange paper[10] reflects on the Government's intention to bring forward the ARIAL programme. The paper offers a contribution by David Willetts that ends: 'Britain's problem is that we need to do better at turning science into innovation … to do that we need to be clear about what exactly is the problem we are trying to solve. And I think that is the challenge of promoting the development and application of key technologies.' This could be seen as a call to establish earlier relationships between relevant industries and Government/university scientists engaged in the development of key technologies. Perhaps this should also be viewed in reverse, whereby greater efforts should be made to identify early stage industrial innovations and expose them to relevant emerging technologies.

Research institutes Bradley's review of the literature on German industry suggests that government research institutes provide knowledge transfer and research benefits to medium sized firms that they could not otherwise afford and that public funding often appears to bridge the gap between the cost of borrowing and the internal rate of return required for viable investment. Industry-wide linkages aid the diffusion of knowledge within Germany.

Agtmael and Bakker's review of innovation[11] in the US and EU also suggests that a great strength of the German (*Fraunhofer*) technology institute system is the way in which it brings together academics and businesses working side by side on a variety of projects. This close working offers opportunities for shared learning and interdisciplinary collaboration that does not trespass on commercial advantage, indeed it may lead to new commercial partnerships.

Independent firms Christensen is a strong advocate of independent firms that are small enough to bring an appropriate cost and culture to the development of new products for an emerging marketplace. Mayer[12] supports this claiming that 'the decline of the UK as a major economic power in the 20thcentury (compared to) the rise of Germany, Japan and the USA (was) associated with the persistence of family block holdings'.

Bradley's work confirms that independence is a major factor in the growth of innovative firms, the longer they remain independent the more innovative they become and the more they grow. Independent here means that the firm remains largely in the hands of its initial owners with external parties holding no more than a 25% stake. The early sale of independent innovative firms is, therefore, detrimental to their transformation into major modern enterprises. Interestingly, Bradley finds that independent innovative firms benefit from lower rates of corporation tax although the tax does not seem to inhibit the growth of other firms.

Despite the growth benefits of independence, Bradley notes how few UK independent firms have grown into major corporations, having sold out at an early stage of development. This

reflects poorly on UK practice where early sale is commonplace.

Larger firms – productivity and regulation Bradley asserts that larger firms have higher productivity than smaller firms, possibly because of the sectors they work in or possibly because of their higher revenues relative to overheads. EU SMEs account for 70% of the workforce but only 60% of production (ECB Bulletin 2013[13]). A recent IMF paper on rising corporate market power[14] offers a caution on this finding suggesting that mergers and acquisitions by dominant firms ultimately contribute to declining business dynamism and economic growth.

The IMF paper concedes that larger firms tend to be more productive initially but as they become hard to compete with, for example, because they entrench their market positions by acquiring other firms, they 'could become less innovative over time and also discourage their (current and potential) competitors from innovating too'. The IMF, therefore, urges Governments to enforce both merger controls and prohibitions on the abuse of dominant positions. Data portability and interoperability of systems is also becoming important for similar reasons.

Venture capital Bradley finds that both innovative and non-innovate firms benefit from venture capital although this is apparently not the case with independent firms. Agtmael and Bakker make a potentially telling point that smaller developing firms find that venture capital providers are too risk averse to support this cohort leaving the field to the vagaries of crowd funding, successful entrepreneurs turned business 'angels' or public authorities who have the vision to establish business hubs to promote emerging businesses. The

recent closure of many high street banks and, even before that, the gradual elimination of locally made bank lending decisions, has greatly reduced the UK banking system's exposure to SMEs thereby creating funding problems for small independent firms. Bradley agrees with Agtmael and Bakker that venture capitalists may not be comfortable with independent firms, effectively denying them of the means to grow, although UK entrepreneurs may simply prefer to sell rather than develop.

UK Policy development Recent academic work presents a clear and urgent need for Government to construct an evidence-based picture of business development in the UK, identifying policies that both help revitalise the business sector and secure the levelling-up agenda. This review would extend across the whole of government, producing a coherent plan that employs initiatives that are effective, specific and affordable rather than broad and unsustainable over the necessary time-scale. The review would include consideration of relationships between innovation and pure research; the seeming lack of fit between investment capital providers and emerging independent innovative firms; the supportive relationships existing between emerging innovative firms, the wider business community and universities; and the cultural characteristics of innovative businesses in the UK.

4. The need for a British growth model

Bradley identifies themes that can be incorporated in British business development policy as exemplified in the next section but her remarks on specific German experience reflect cultural

aspects of innovative practice that may be difficult to replicate precisely in the UK.

The German Fraunhofer Institute system that may be regarded as a difficult fit with the UK's university sector. Nevertheless, the combination of the London Bioscience Innovation Centre sponsored by the London Development Agency and the Francis Crick Institute sponsored, amongst others, by the Medical Research Council offers a British example. So do the seven High Vale Manufacturing Centres (HVMC) offering various specialisms and located in the regions that bring together academic and industry specialists working with businesses seeking to innovate products and processes. UK trade groups, also meet to explore new industrial techniques and emerging problems.

The issues are, therefore, of relevance and ease of engagement (whether, say, with an appropriate university department or HVMC), particularly for the time-poor SME. Is there clarity about what is needed, are potential beneficiaries aware of what is already available, are the right facilities available in the right place, as the system actively inclusive? A report by the ERA Foundation[15] suggests that a review of local industry strategies could give answers to some of these questions. The UK has clearly started at the wrong end of the spectrum, we accept the scale of the tasks required to move into a more satisfactory position?

The German commitment to vocational training presents another point of variance. Agtmael and Bakker reflect on the respect for vocational development in the German manufacturing tradition, including training for postgraduate entrants to industrial environments. College and firm work together to ensure that employees receive appropriate skill training up to

a very high level throughout their careers on a part time or full time basis.

The white paper Skills for Jobs[16] represents a commitment to improve the quality and status of vocational training in the UK. It reads as though the focus is more on training and qualifications than forging a collaboration between employer, college and employee to achieve relevance to the workplace. Can practical skills be properly acquired without emersion in the workplace environment? European working culture tends to value stability of employment and the poaching of employees is discouraged. The white paper offers transferability of employment during training as a key selling point.

The research suggests significance in the readiness of UK business founders to relinquish ownership of their businesses compared to the prevalence of longer term family ownership in Germany. The mutual support between firms within business sectors, albeit not necessarily direct competitors, is another key difference between the two systems. The latter is clearly more feasible in a stable ownership system where trust can be developed over time. Should these differences be accepted or does the UK Government have a role in at least questioning cultural practices and facilitate further consideration of business community behaviour?

The funding of emerging firms presents a challenge. In part, the German institute system helps mitigate the need for development capital. The research suggests that the availability of development capital can present a significant hurdle for emerging British firms. The UK Government has recently established the British Business Bank[17]. This is less a bank and more a portal for various private sector business advisors and venture capital providers working within

Government guidelines. A bank should learn about its clients and develop its offering accordingly but Government will lack the necessary feedback. Both Government and client will be limited by how intermediaries choose to execute their roles. This is not a development bank as one might expect, it could be seen simply as a means of disengagement by Government.

The UK's annual university R&D Research and Innovation Programme and defence R&D investment amount to almost £10bn. This dwarfs the current intentions for the ARIA programme of £220m a year. How does the UK shape these larger R&D budgets so that, working in conjunction with the R&D resources of the private sector, it may make the greatest impact on business innovation, productivity and growth? Perhaps there should be a twin track approach, part Government-identified research programme developed in close collaboration from the start with UK businesses and part a willingness to invest behind a business or business sector that is already making demonstrable progress with some form of innovation. Whatever the chosen approaches, the firm must be front and centre not the late-comer for whom the menu choices have been pre-selected.

Every country has its unique culture and institutions necessitating a unique development path. A simple switch from one culture to another is rarely possible and few systems are ideal in themselves. The UK must learn from others but ultimately it must find its own way of using innovation drivers to achieve growth and prosperity. This must be a collaborative process involving business, the public sector and academia, each element being a loose collection of constituent parts with diverse objectives. The Government's recent white paper Build Back Better: our plan for growth[18] is the traditional shopping list, subsequent discussion needs to identify the effective means by which aspiration becomes

reality.

The underlying assumption of what follows in this paper is that the necessary approach to levelling-up should be a process of regionally-based business development supported by a raft of Government measures. The consequent economic growth will then support self-sustaining communities that do not require disproportionate amounts of state aid to provide the trappings of physical regeneration that belie the reality of lived experience.

Some serious modifications to UK practices are long overdue and many of them rest in Government hands. Producing the right set of measures across so many fields with so many stakeholders will be no easy matter but there can be little doubt that Government must acknowledge its pivotal responsibilities. Should the Government fail to provide the necessary vision and leadership then there will still be individual successes but the economy will seriously underperform and the project will fail.

5. Elements of reform

The proposition set out above suggests that the most effective way for the Government to approach its commitment to level up the regions would be for it to adopt a programme of long-term public service interventions designed to stimulate regional economic development. It would be formulated with a consistent focus on business innovation leading to productivity improvements and growth. By careful and well informed programme design it is possible that the solution may rest more on insight and long-termism than huge public investment.

Some examples are outlined below.

Personal development

One of the critical lessons from Bradley's study is that skilled human capital is one of only two drivers of innovation that are effective across all businesses. The development of skilled human capital starts in many cases with the final two years of schooling followed by a university or technical college education (see below). It is imperative however that the process does not end there. There may well be the option of in-service training. There may be project work assigned to achieve both business outcomes and personal development. There may be formal mentoring by an experienced colleague and there will always be managerial oversight to assign, guide, assess and support.

This process is clearly best suited to continued employment over a lengthy period. Both employee and employer value the learning process that delivers the capacity to recognise opportunities to innovate, leading to improved productivity and growth. Such intuitive leaps are a combination of innate ability and the history of personal development for which the individual and the firm are equally responsible.

Higher and further education

Universities are also a driver of innovation that prove effective across all businesses. They provide knowledgeable graduates equipped with key skills, in-service training, joint ventures, spin-offs, guidance relevant to new fields of work and research to extend chosen development pathways. University

start-ups, spin-offs and ownership of IP can all facilitate business development. HVMCs need a revolving door to academic expertise and perhaps more universities and firms need to be actively engaged within this new system. There are a whole series of relationships here that should be reviewed and probably improved.

Technical colleges can provide learning partnerships to impart essential skill training to a very high level. If the UK is to revive its industrial base to any significant extent then this education sector must be revisited, training must be more extensive, links with firms much closer and steps must be taken to develop a more collegiate approach between firms in industries with similar training requirements.

The whole of higher and further education must place a keen focus on business growth and regional development. Universities must see themselves as key facilitators of regional development and not necessarily the region in which they are situated although that is a good starting point. Funding should follow both relevance and results.

Networking

To-date there has been a tendency to establish business parks and industrial estates to help with infrastructure planning and cost-effective roll-out. Without discounting the development of business parks it is clearly important to focus more specifically on the siting of businesses in similar industries around centres of research and expertise to facilitate technology development and transfer. Locating similar emerging businesses in dedicated business hubs could be relevant. Research suggests that benefits could accrue from

encouraging collaboration between larger firms and their suppliers.

Benefits could also be derived from experimenting with the development of standing conferences of multidisciplinary sector-specific commercial, HVMC and university sector expertise to exchange knowledge and prepare for future business ventures.

A general theme in the section is that in all respects networking between commercial interests and universities must improve significantly if the UK is to recover ground lost in all commercial areas of science and technology and manufacturing of all kinds on which regional recovery most clearly depends. Government clearly has a major role to play in facilitating this transformation.

Ownership and capital culture

If being an independent firm and remaining independent for as long as possible is the key driver of innovative capacity then it is important that firms should be encouraged and enabled to remain independent.

A dual share system allowing initial owners to retain a degree of control while enabling a wider pool of investors to reap financial benefits should find a champion in Government. A properly constituted regional development bank could be granted powers to offer loans, equity investment, loan guarantees or interest support depending on the nature and size of company and proposed investment. The creation of technology hubs or institutes could help support emerging

businesses and reduce their dependance on development capital.

Improved protection from foreign and hostile acquisitions and from the more subtle abuses of dominant market positions are important. Regrettably the necessary provisions contained in the National Security and Investment Bill seem to have been lobbied into retreat.

New thinking on issues in this section should be informed by a review of the cultural and institutional factors affecting the behaviour of independent firms.

Taxation

Tax incentives for regional investment can be facilitated by freeports and enterprise zones which should be configured in widely defined areas to facilitate the requirements of individual firms. Such zones should provide extra exemptions from corporation tax for a range of expenses, offer shorter capital write-off periods, NI exemptions, reduced corporation tax rates and extended tax payment regimes. The effects of such measures would be monitored and shaped according to effectiveness

In return for special tax benefits or capital support (as referred to above) the Government may wish to take a shareholding or a golden share preventing sale and relocation without permission. There is a view that such protection dissuades investment nevertheless it would seem a justifiable option in return for state support and commercial advantages.

Infrastructure

Infrastructure is often discussed in terms of gigantic road, rail, power supply and infrastructure programmes but if the task is to increase business activity in the regions then the specific needs of attracting and retaining business may well involve a mix of infrastructure components that may look very different depending on the businesses involved.

The impact of Covid-19 on long-term work habits is not yet clear but changes could be quite radical. The infrastructure demands of existing regional businesses and households and the consequences of changes much further afield must be assessed: changed traffic flows could ease road and rail congestion; greater homeworking could change the locations and timing of power supply requirements and internet bandwidth demands could be affected in many different ways. The impact of changed conditions and possible additional demands of new businesses require consideration across the utilities. More joined up and agile operational responses must be developed to accommodate the possibility of changing requirements.

A similarly responsive approach is also required from public and private sector providers of the social infrastructure consequent on regional economic development.

Government as client

It is essential that UK Government bases its own technology and manufacturing needs on UK businesses wherever possible in order to develop a stable nucleus of demand for viable, innovative products.

The Government should ensure that all departments appreciate the responsibility they bear for developing and managing its British-first policy as a facet of UK business development. Government departments must be required to ensure familiarity with British suppliers, provide them with a good understanding of relevant operational circumstances and review current offerings with them identifying problematic and beneficial aspects.

All suppliers who offer evidence of good competence should have a reasonable expectation of winning bids at some level that will enable them to gain a better understanding of the Government client and provide the client with the opportunity of making an operational assessment of the supplier's potential. Tendering processes should not contain expectations of supplier-side drafting that could only reasonably be expected from a seasoned supplier. In part, Government contracting should be seen as contributing to business development where the contractor appears capable of reaching the necessary standard.

The Government procurement policy must embrace start-ups and small companies including those in technical fields. Special effort must be made to reach out to new companies that show real intent, imagination and the capacity to develop. Additionally, Government contracts are not always seen as the most attractive position and failure to connect may constitute a lost opportunity for both parties[19].

Independent supplier surveys should be undertaken to explore tendering and contracting experiences and thorough reviews should be undertaken of the way departments handle suppliers both in the tendering and contracting elements of the relationship. Results of such surveys should be made public.

If it is intended to make Government a more approachable client then it is important to ensure that the rules governing the involvement of civil servants, ministers and advisors are transparent and prevent personal gain. This will not safeguard the system from poor performance by some new entrants to the Government market place. It is unacceptable, however, to minimise that risk simply by shielding client-side actors behind an exclusive club of major names.

Government as entrepreneur

The Government's role as client and facilitator is aligned to numerous innovative fields, such as: healthcare; renewable energy; digital technology and military aircraft [20]. Other fields are moving into new phases of innovation of relevance to the UK including agriculture.

US-style multi-agency, business-linked research and development programmes such as DARPA offer major commercial opportunities and are gaining prominence in the UK. The Government has established a number of business focused research programmes, most recently the ARIAL initiative. It must be accepted that there will be failures but American experience has also demonstrated success. The key shortcomings of such programmes can include being too focused on academic interests and limited in the choice of institutional partners.

Innovation is not, however, wholly or mainly prompted by research programmes. Recognition should be afforded to the many innovative developments that were based on proven technology used in new ways, then subjected to repeated cycles of product development. In normal circumstances the Government's role as entrepreneur should be alert to the R&D

support needs of product development, particularly involving emerging businesses, rather than attempt to dictate the course of business innovation.

Where the Government is the effective client about to embark on a major spending programme that offers product development opportunities or cannot be accommodated by existing UK suppliers then Government must signal its intentions and lay the groundwork for an appropriate UK business response using the various levers discussed.

A recent review by Kundu, James and Rigley[21] suggests a consensus over the importance of public procurement in promoting innovation and technological development. It cautions, however, that public procurement as an innovation policy tool has only been applied in a few countries and a few contexts. Furthermore, the academic literature on the subject rarely addresses questions on impact. This emphasises the need for Government to ensure rigorous evaluation of implementation and continuous development of the methods used.

The remarks made in the previous section about client-side rules of engagement also apply here.

Government as employer

Government should devolve whole departments and major divisions of departments to the regions. This is not just a matter of exiling low skill jobs to the regions but of relocating senior management and ministers to help inform Government of regional circumstances and signify the arrival of national not London government. In the new world most

central decision-taking could be undertaken from a regional location. Some steps are in progress, much more is required.

6. Conclusion

Levelling-up the regions is a long overdue vision to provide opportunity for communities that are experiencing the continual loss of talent to London and the South East leaving behind communities that are increasingly less vibrant and self-supporting than they should be. The vision requires tremendous energy and commitment in the face of vested interests that will inevitably resist. If it is to be accomplished then the PM must play a key role in ensuring that the commitment remains intact, the vision is fully developed, the Government's framework for action is prepared and implementation is relentless.

Recent studies of innovation, productivity and growth offer direction for the levelling-up agenda. They help identify structural and cultural challenges that must be addressed if successful outcomes are to be achieved and form the basis of this paper.

It is suggested that regional location should become a prime requirement for business incentive schemes and business development initiatives. Further consideration of infrastructure requirements may also be appropriate in changing circumstances. A drive towards reshoring some margin of production to the regions should help achieve greater economic resilience in the face of an uncertain world although an innovative, high productivity approach would be required to achieve viability.

Universities should be encouraged to forge ever stronger links with business. Specialisms available in universities and university hospitals must be matched with the vision and know-how of emerging firms and industrial sectors. Industries should be supported by R&D programmes devised and undertaken in collaboration with universities, HVMCs and where appropriate new specialist technological institutes.

This approach should be capable of achieving intensive multidisciplinary working between the academic and commercial worlds. At best, the aim should be to encourage teams working on projects in similar fields to share experiences and expertise, and to collaborate on business ventures where opportunities arise. Where common interests apply, established firms should be encouraged to offer emerging firms partnership working, mentoring and financial support. Technical colleges must reach out to shape the training experience around the needs of local employers and training input must be life-long.

Public sector funders must be alive to the areas of new interest to business rather than squeezing business into a preordained vision of the future. Where new Government requirements drive innovation then UK business must be engaged at the outset and appropriate business development strategies should be put in place to encourage new independent businesses to engage with the opportunities presented. Government should also act with diligence as a client of routine goods and services to promote emerging businesses and those businesses that are simply new to the Government marketplace. Tendering specifications should be designed specifically to include those without practice in government tendering processes even though that may marginally increase risk and make assessment more arduous.

The protections afforded to business ownership must be reviewed together with the funding and taxation of emerging and medium sized businesses. Anticompetitive behaviour of all kinds must be rigorously discouraged.

Government should also emphasise its regional commitment by relocating most of Whitehall to the regions, using digital technology to become a modern networked operation.

The Government must now publish a long-term, wide-ranging and imaginative plan for levelling up the regions through a process of business development, prioritising support for innovative businesses and independent firms with the objective of securing improved productivity and growth. Inevitably the plan will need revising as experience develops but the objective must remain the creation of opportunity for regional communities.

It is time to move from slogan and gesture to a clearly delineated course of action. The current circumstances would have been chosen by no-one but a response of this nature would be very timely.

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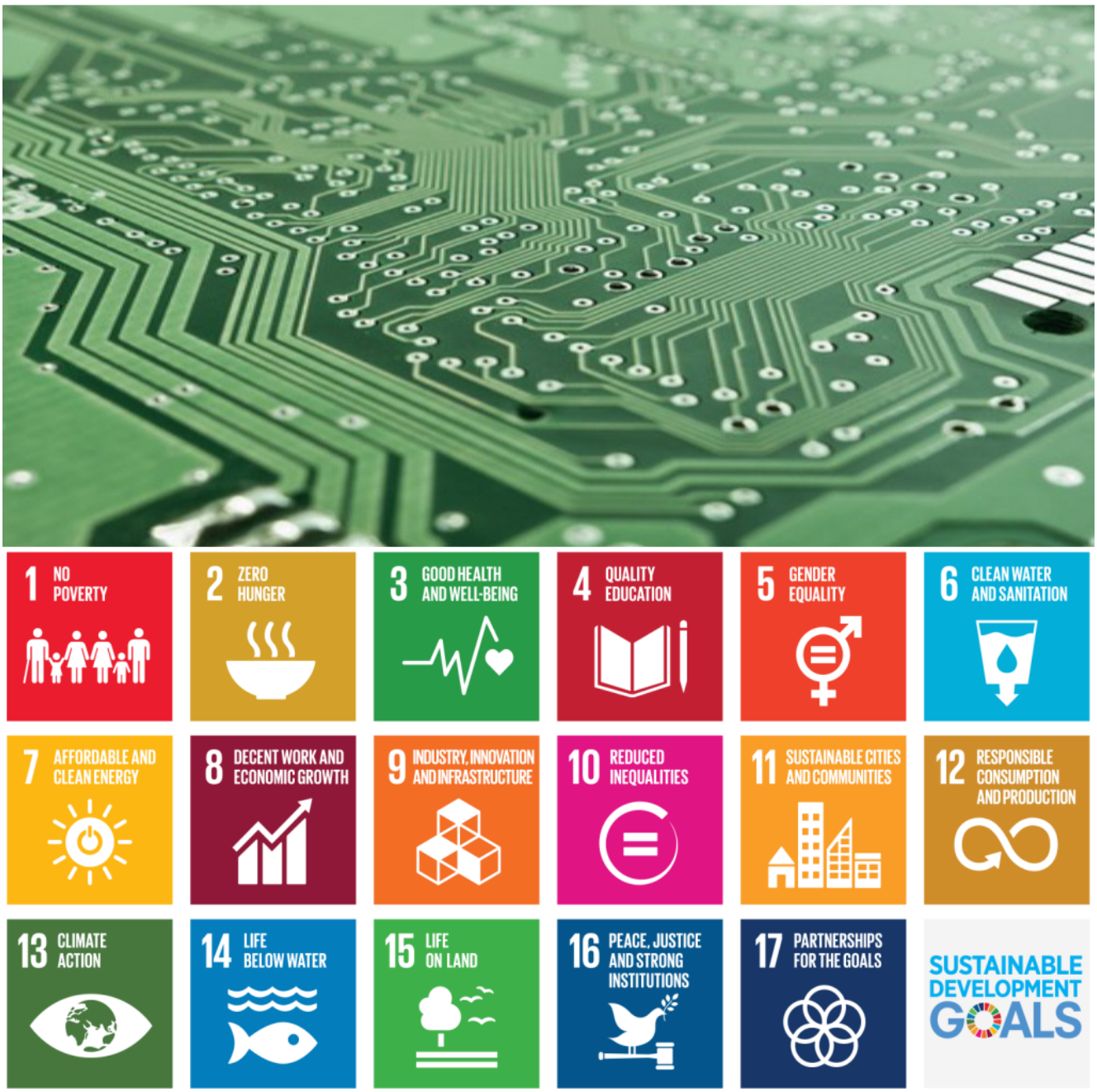
[19] https://rusi.org/sites/default/files/op_202003_the_challenge_of_change_web.pdf

[20] https://rusi.org/sites/default/files/tempest_programme_final_web_version_0.pdf

[21] https://academic.oup.com/spp/article-abstract/47/4/490/5903068?redirectedFrom=fulltext

Using Digital Technology to Improve Sustainable Development Goal (SDG) Delivery



by David Fellows and Glyn Evans[1]

The SDGs

The United Nation's SDGs present an array of complex social, engineering, medical, scientific and managerial challenges for member states set in different contexts and mostly requiring very significant investment, organisational capacity and community involvement. Nations have made commitments to this agenda and it is accepted as guiding the key purposes of international development work worldwide. It is a hugely ambitious enterprise yet we suggest that current development work could be more successful.

The need for a powerful learning system

At a general level perhaps the greatest challenge is the creation of a learning system that is powerful enough to develop and distribute relevant knowledge and an understanding of how that knowledge can be best applied in the very different circumstances that exist across the world. As SDG performance criteria are finalised and adopted a report by ESCAP makes it clear just how difficult it is going to be to make a real difference.

We are not suggesting a great deal of organisation to create this necessary learning system. We propose a loose system of networking between experts based on digital communication. This would enable advice to be made available to community-based projects with greater levels of expertise being made available to the development of major programmes and projects. It would also facilitate feedback on project progress and performance. The use of digital technology would also improve the public information base and support public engagement.

Learning system features

The basis of this networking would be a digital communication system that would be largely self-driven by those in the field and a support network that will evolve around them. Key aspects of this digital communication system are illustrated below.

At national and local level:

- *Provide* feedback on progress made at local level within the country
- *Request the public to identify key factors to be taken into account when designing SDG initiatives*
- *Seek feedback on the regulations required to support SDG initiatives*
- *Engage in shared learning (perhaps amongst scattered populations) between ordinary people who are trying to cope with SDG challenges on limited resources*

At regional level:

- *Undertake shared research programmes*
- *Share experiences of adapting recognised approaches to particular circumstances*
- *Improve monitoring techniques*
- *Share monitoring and advisory services*
- *Encourage the development of problem-solving support networks*
- *Undertake peer reviews of projects and governance*

arrangements

At international level:

- *Build worldwide expertise to address fundamental scientific, engineering, economic, social and implimentation challenges*
- *Identify and promote successful strategies and initiatives*
- *Recognise issues for which effective solutions remain elusive*
- *Create networks capable of addressing significant and urgent challenges*
- *Develop modeling tools to help design solutions*

Supporting technology would include:

- *Websites including chat rooms, website messaging, on-line data monitoring and*
  online questionnaires
- *Video-conferencing for expert dialogue and advisory sessions*
- *Cloud-stored databases and shared document development*
- *Email for public interactions(newsletters), dispatch of documents,*
  technical & administrative correspondence and technical update circulars
- *Learning management systems to support training programmes that*
  develop skills and expertise
- *Application software to assist the gathering of performance data*
  including the collection of data from administrative

sources (ESCAP Report ibid: page x)

- *Text messaging and social media for public dialogue*
- *Massive open online courses to raise general awareness*

In general such a system would require relatively unsophisticated technology dependent only on fairly low level digital communication. Expert dialogue would tend to benefit from good connectivity at reasonable bandwidth to support video conferencing although this is not absolutely essential. Proprietary software is readily available for most of these applications although bespoke monitoring, modelling and assessment tools could be created as the approach gained traction.

Examples from around the world

Our blog 'An International eCollaboration Route to Public Service Reform'
(also published by the Australian National University's DEVPOLICYBLOG in July 2017) considers the diverse power of digital communication technologies. Examples of this technology used in ways relevant to this proposition are, as follows:

1. An example of 'Shared Learning' is set out in the UNESCO publication Digital Services for Education in Africa. UNICEF has reported that in Vietnam 40% of children in rural areas used the internet for educational purposes, rising to 62% in urban areas.

2. Communities of practice have already been established in

Canada for green climate purposes

3. Social media has been used by PFMConnect for the past three years to raise public awareness on public financial management and governance topics reaching significant numbers of people in more than 50 countries.

Conclusion

This is not a system requiring heavy oversight and regulation. We seek cultural change to the way programmes and projects are developed. A more inclusive approach at expert and community level could be usefully supported by major development agencies and could become a requirement on contractors. For instance, these proposals could help the Green Climate Fund which appears to be heavily engaged in process issues at the expense of shared innovation.

Is it time to experiment with change?

End note

We should be pleased to discuss the ideas in this piece with those who believe that they may have relevance to their situation.

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Digital Government in Developing Countries

Posted by David Fellows and Glyn Evans[1]

With the aid of development partners, developing countries are making commitments to maximise the use of digital technology. The ICT industry is right behind them. In these reforms, digital technology is being represented as the principal transformative medium of government. But to think of “Digital

Government" as necessarily transformative, almost an end in itself, is misguided. Governments should be primarily concerned to provide their services and engage with electorates in the most cost-effective way. Digital technology may or may not have a role in that process.

Here are some of the fields in which digital technology has demonstrated that it has a potential role to play in developing countries:

- Transparency and public engagement
- Basic public service delivery in the fields of health and education
- Public safety and security
- The collection of tax and non-tax revenues
- The management of population growth in urban areas
- The sustainability and development of rural communities
- Skill shortages throughout the economy
- Economic diversification
- Measures to combat corruption
- Resilience to natural disasters

We do not accept, however, that the answer to any of these challenges is necessarily a massive investment in digital technology, say a 'digital city' or a fully integrated expenditure, revenues and payments system.

Many developing countries are not well positioned to make sustainable progress with digital technology in huge multi-faceted programmes requiring vast initial expenditure. This form of development may do little more than provide substantial fee income for international consultancies and software developers. Once the consultants are gone and system

design faults surface, client needs change or in-house staff are poached by others, then the facilities that promised so much may become more of a hindrance than an advantage.

Things may not even get that far. Without governments having sufficient staff with the necessary technical skills, digital systems may never be properly configured and the client may be left with a partially implemented system. Nevertheless, it is surprising how many such projects are specified and funded. Problematic factors are sometimes acknowledged without being fully taken into account.

We suggest that an evolutionary approach to digitally-enabled reform offers a more realistic way forward. The process should start with an analysis of the operational imperatives for improvement. This requires the following ten-point strategy:

1. A clear vision for future service delivery and the developing relationship between citizens and the government
2. A thorough assessment of internal resources (skills, knowledge, staffing commitments and budgets) required to support the implementation of reform and new ways of working
3. An overhaul of management philosophy and governance arrangements
4. The identification of mechanisms to address relevant gaps in capacity including improvements in the recruitment and training of in-house staff and encouragement of local firms to upgrade their ICT capacity incrementally to support public service digital applications (multinational collaboration for the professional development of public servants and the improvement of governance and working practices are

addressed in previous blogs)
5. An examination of the various options by which change can be achieved
6. A robust approach to investment appraisal
7. An assertion of priorities based on sound information and analysis
8. A clear strategy to deliver project sustainability (including security)
9. The identification of the benefits sought and how such benefits are to be achieved, and
10. A relentless focus on benefits realization accompanied by the modification of working methods to rectify performance shortfalls.

This approach is based on our past work, which we can illustrate with examples of two completed major projects, as well as our experience in developing countries.

The first example in Knowsley, one of the UK's most deprived areas, was one of the world's first "smart city" projects, started in 1997. It featured public information systems, electronic application forms, payment facilities, public feedback on quality of service, schoolwork support, an interactive liveability learning application for mentally challenged young adults, digital enablement schemes and public availability of PCs in libraries and community centres.

The second project in Birmingham, the UK's largest metropolitan municipality was probably the largest digitally-enabled change programme ever undertaken in a European city. It included the digitisation of procurement, HR (including performance management) and accounting practices, providing managers with accurate, real-time information, and digitising customer contact and the fulfilment management of customer

requests, resulting in customer satisfaction improving by 20 percentage points. The entire change programme realised revenue savings of £100 million a year.

These examples suggest that it is possible to make significant reductions in the risk to both funders and recipients of digital-enabled developments by:

- Preparing an organisational readiness analysis and development strategy as set out above
- Establishing the necessary roles and finding the right people to fill those roles
- Monitoring and evaluating progress, and
- Responding with operational modifications as necessary to achieve the desired outcomes, and as technological advances offer fresh opportunities.

Some developments will not necessarily require state financial or operational support. Private sector encouragement may be sufficient. For example, physical planning that offers confidence to developers or infrastructure standards that support the public use of digital technology.

In our view, a challenging reform agenda demands a flexible approach, cool judgement and realistic timescales. Those in positions of responsibility should take steps to avoid being found friendless and trapped by the expectations and largesse heaped upon them.

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of the Swedish Prize for Democratic Digital Service Delivery. Glyn Evans is the Vice President of the Major Cities of Europe IT Users Group and former CIO of various major cities.

The case for an international online public service academy

by David Fellows [1]

Introduction

The purpose of this post is to consider how digital communication could be developed for the provision of structured professional education for public servants in developing countries using an academy model. This proposal is based on the proposition that there is a widespread need for professional training to improve administrative effectiveness through a general grounding in the nature of public administration and its place in society; the study of key aspects of public sector management, relevant techniques and

organisational values; and the examination of reform objectives and the means of achieving them.

Why open learning for developing countries? Well, a campus format bears a heavy cost-base and brings the practical difficulties of assembling the teaching staff necessary to deliver the standard of professional education required. It also incurs the loss of students from the workplace for substantial periods of time, together with the costs of student travel and accommodation. The positive advantages of an open learning format include the flexibility of study time demands on student availability and, potentially, the benefits of an international experience for participating students given their interaction with students and teachers from around the world. This kind of initiative is not irrelevant to developed countries but I suggest that the priority and funding model should address the needs of developing nations first and foremost.

Geographical reach

The use of digital communication provides for flexibility of student and teacher location. Seminars and staff meetings could be held online, academic material developed collaboratively over document handling systems, and student work could be dealt with by email or in-house systems. This would not be far removed from how most higher educational institutions are developing staff/student communication even where they are campus-based.

There may be merit in some courses being directed to regional groupings of students in order to provide greater focus on regional issues and it would make sense to do this using tutors who are immersed in the regional context. There may even be merit in some courses being run on a purely national basis. It would certainly be important to ensure that student study programs are aligned to the needs of the employing

governments, possibly reflected in the nature of assignments or course options.

There could be a single worldwide institution with regional coordination to foster government relationships and accommodate periodic student workshops, although this is not essential in order to gain advantages from this format. There could be regionally based institutions or some states could operate primarily on a national basis.

Student body

The students would be permanent officials of the public service in developing countries. There could be extensive flexibility about study arrangements including varying amounts of office time allowed for study purposes. This would be part of the arrangements to be agreed with the institution, and individual student study programs would take this into account.

Students could be encouraged to come together regularly online on a national or international basis to discuss their needs and course provision. Academic staff could join such meetings on request. Regular physical meetings of students could be possible on a national or departmental basis as well as at occasional regional workshops.

Prospectus

Initially the prospectus should be developed around core governance-related topics: policy development; management and leadership (including roles and responsibilities of politicians and officials); human resources (including capacity development, appointment processes, records); public financial management; law; ethics; and economics (as a more contextual subject). Student programs could identify specific elements to be taken at a more advanced level (e.g. taxation or international trade). Some elements could be country

specific.

The student program-based approach should allow flexibility in syllabus scheduling to reflect the time commitment made by each student. This does not mean that study would be unscheduled but that work schedules would be agreed with employers and students with the intention of building student cohorts around particular schedules. Tutors would be assigned to support each student cohort in making the necessary progress.

Courses would have action-oriented elements so that demonstrable benefits are gained for client governments from each program of study. Relevant benefits would be stated at the outset and evaluated in student assessments and satisfactory course completion would be formally certified.

In addition, short courses on service specialisations could be developed or a mentoring service could be provided for newly promoted administrators.

The foundations

There is no need to create a completely new institution. There are a variety of bases on which the proposals could be founded. Various universities, civil service colleges and development agencies (e.g. the new online Public Financial Management Course just launched by the International Monetary Fund) around the world could establish the kind of institution proposed as an adjunct to their existing courses and program. Doing so would also provide the governance and administrative arrangements on which to base the new institution.

There is also no need to make extravagant claims about the possible size and scope of the institution. It could perhaps take a modest group of nations and development partners as a starting point. It is interesting to note that three conventional universities in the UK offer online Masters of Business Administration (MBA), one of which offers a two year

course, and the others are more flexible with UK citizens forming a minority of each student body (ranging from 11% to 48%). In addition, the UK Open University Business School offers two and three year MBAs worldwide.

Nor is there any necessity to suppose that the starting point would be located in the northern hemisphere amongst the traditional developed nations. There would simply need to be familiarity with the concept of an open online college. Is the Singapore Civil Service College a prospective starting point? Could India launch an online Civil Service College to satisfy its own needs, while also attracting students from further afield?

Client state engagement in governance arrangements would also offer the opportunity of using the institution to further South–South collaboration and the greater ownership of development philosophy by the developing nations.

Funding the academy

The academy model is capable of being funded jointly by client governments and development partners. Cost-sharing could be flexible. Costs could be contained through collaboration agreements with appropriate institutions and the variety of expertise achieved in this way would add to the benefits of the model. The cost-benefits of online education have been demonstrated by existing institutions and must be exploited for this purpose.

The set-up cost would depend to some extent on the institutional foundations. Digital infrastructure costs would be scalable through agreement with application service providers with concessionary pricing being sought particularly at the outset.

Conclusions

The purpose of this brief note is to suggest that it is now possible to provide extensive and high quality professional

training for the public servants of developing countries with courses delivered predominantly via digital technology. It is further suggested that such an initiative would be cost-effective and possibly developed incrementally out of an existing institution(s).

At the current time capacity development has fallen out of favour with development partners due to the lack of clear linkage to measurable reform. I suggest, however, that without increased professional development for government officials the very ambition of improving state institutions is fundamentally flawed. It is for those engaged in the formation of new institutions to demonstrate the effectiveness of such initiatives through the delivery and assessment mechanisms that are embedded within them.

[1] The author is a Co-principal of PFMConnect. A slightly abbreviated version of this blog is available at the Devpolicy Blog of the Development Policy Centre based at the Australian National University's Crawford School of Public Policy.