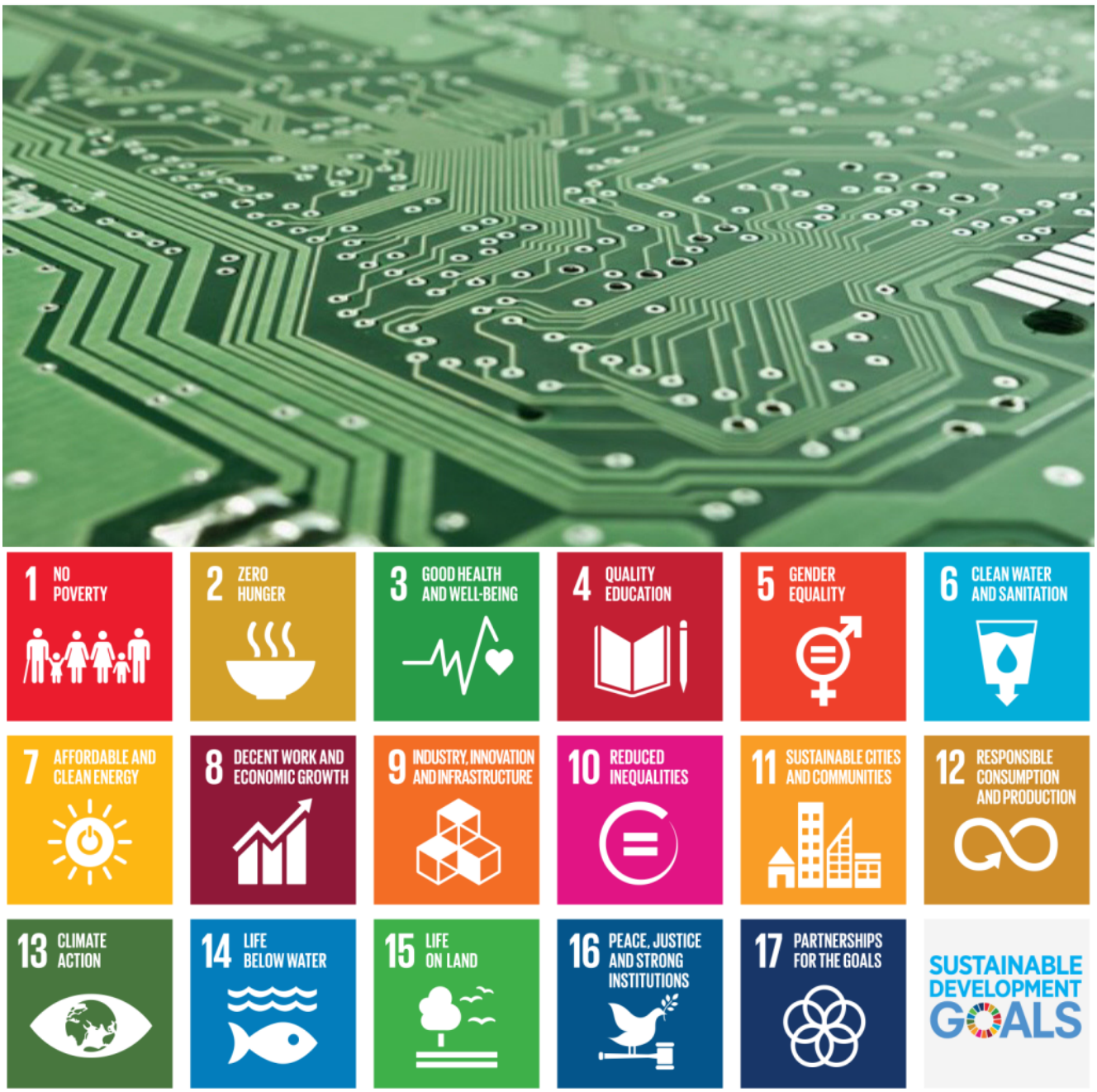
Using Digital Technology to Improve Sustainable Development Goal (SDG) Delivery



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

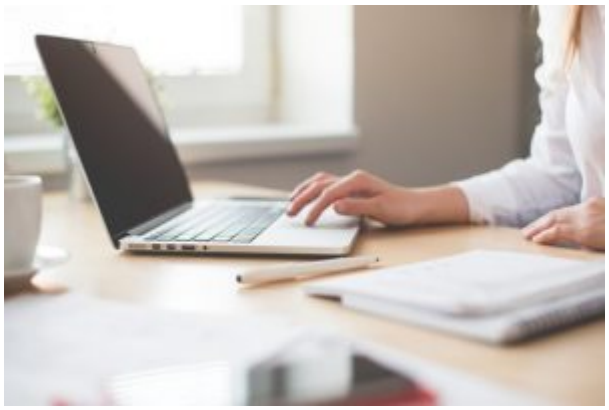
The purpose of this brief note is to suggest that it is now possible to provide extensive and high quality professional

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.

An International eCollaboration Route to Public Service Reform



Author: David Fellows

Governance of public affairs is a complex topic. It includes the processes by which decisions are made, the means by which service performance is assessed, the standards of behaviour to which public servants are held, the transparency applied to public life and the extent to which ordinary citizens are engaged in policy-making. In this respect, developing countries provide a wealth of expertise and examples of outstanding practice, research projects, and reform programmes.

In this post I propose an approach to governance reform in developing countries that is owned and developed more extensively through multinational collaboration, and that uses digital media as a basis for that collaboration. This is not to suggest that development partners should be excluded from generating ideas or providing support but that developing countries should become more dominant orchestrators of their own development through more effective collaboration.

Working with an International Perspective

Each nation requires its own strategies and implementation plans for governance reform, reflecting its specific needs, capacities, cultures, geographies and priorities.

Nevertheless, multinational collaboration can offer a valuable combination of experience, ideas and expertise from diverse perspectives. At the centre of such an approach would be those who are responsible for achieving administrative reform, both civil servants and politicians, and who are intimately familiar with the challenges of the operational situation.

Such an approach would require an open and honest sharing of key problems and possibilities, the reality of progress made and the means by which achievements are being realised. Research could be shared at an early stage, development programme progress could be followed as it is rolled out and promising initiatives could be emulated promptly. Practical solutions could be sought to common problems, including mutual dependences.

This shared approach could involve officials, academics, staff from development agencies and the private sector, journalists and other experts. Technology can facilitate virtual exchanges that would not otherwise be feasible due to time, cost, and travel restrictions. It could enable the engagement of those best placed to assist, rather than those who are most readily available. In short, digital technology is an excellent medium for bringing the most appropriate combination of people together in a low-cost, time-efficient manner.

There are very many collective organisations in most if not all regions of the world, including organisations with broad national representational remits, organisations consisting of specific types of institutions, and professional bodies. The purpose of this proposal is not to supplant these organisations, but to use them as a source of expertise, conduits for dissemination and platforms for discussion. Regional collaboration whether of formal groupings or ad hoc alliances can also provide a highly effective means by which these proposals can be approached in their entirety.

New Ways of Working using Digital Technology

There are four basic strands to my proposed approach: (i) collaborative development arrangements; (ii) expert advice and mentoring; (iii) professional training for public servants; and (iv) public transparency and engagement.

(i) Collaborative development. Central to this proposal is the notion of collaboration: sharing current practice; learning from research and reform programmes; and identifying more effective ways of working through collective consideration. Relevant subject matter could include: public procurement; budgeting and performance management; auditing and risk management; broad-based annual reporting; the appointment of public officials; the conduct of elections; declarations for public office; small business development; cross border trading; taxation policy and the administration of justice. Broader themes are also relevant, such as strategic planning; combatting corruption and equality of opportunity.

A key aspect of the collaborative approach is to engage a broad range of relevant people to contribute their ideas, experiences and judgements. The emphasis should be on how national priorities might be identified, reform programmes constructed, and viability tested. Their objective would be the creation of reasonably effective solutions that are affordable, feasible and sustainable.

The use of digital technology would allow flexible connectivity between people and ready access to information resources. Databases capturing a wide variety of policies, plans, reviews, process descriptions and standards would need to be constructed and made available for interrogation. Updatable schedules of financial and performance data would be required together with platforms to facilitate multiple authoring of documents. Working group meetings could be

conducted over video conferencing systems offering document display and a record of proceedings.

(ii) Expert advice and mentoring. Beyond large group collaborations, the proposal also offers the opportunity for knowledge and experiences to be shared on a more personal basis. The key technological contributions here would be email, chat rooms and video conferencing with some use of databases as discussed under (i) above.

(iii) Professional training for public servants. Professional training is an essential aspect of public service development. However, traditional training methods can be highly expensive when physical attendance is required and can make significant demands on the student's time away from the office.

'Open university' approaches to further education have been in operation for decades in many countries and new technology has given them a boost [1]. There is no reason why the model cannot be extended to suit the particular professional development needs of public servants from developing countries.

Digital technology can enhance the learning experience with video packages, interactive learning modules, online assessments, conventional study material, chat rooms and email exchanges together with video conferencing for tutorial sessions. Existing study programmes (e.g., World Bank courses) could be incorporated. Academics from major institutions around the world, experts from development agencies and specialists from international centres of excellence could be approached to lend support, providing a rich learning experience. It is possible that some existing public service training institutions could provide the basis for this type of provision.

Financial support for traditional training facilities has tended to fall out of favour with development partners.

Perhaps this should be reconsidered using an evidenced-based approach to the value derived. A recent study [2] undertaken by PFMConnect provides substantial support for the feasibility of such an approach.

(iv) Public transparency and engagement. This can equip citizens to contribute ideas for the development of public service and hold officials to account for their judgement, integrity and effectiveness. Going further, it can also help to reduce costs and improve service benefits, root out corruption, and create confidence in public institutions.

This process of accountability and engagement can be effectively achieved through official websites, chat rooms, email and social media. There is considerable scope for all governments to improve two-way communication with their citizens. A professional training institution as discussed above should seek to play a leading role in advancing key developments in administrative reform, including public transparency.

Key Technical Considerations

This proposal mainly concerns the infrastructure available to central government services in capital cities, as central government offices are the principal subject of these proposals. In this respect there is already a fairly high standard of general internet connectivity and the capacity to implement facilities of the kind required. The public engagement aspects must, however, rely on whatever public networks are available in a particular locality and these can be expected to improve over time.

In terms of government offices, there appear to be three principal technological issues. Firstly, individual offices need to have appropriate internal facilities. Secondly, there will need to be agreement to a range of key considerations concerning the digital architecture, service providers and

core software products. Some issues must be decided internationally and some can be left to local discretion. For example, video conferencing requires basic software decisions to be made on behalf of all users with operating systems and browsers having the capacity to support the chosen software but beyond this there can be considerable desktop flexibility. Thirdly, it may be useful to establish document standards for certain purposes [3].

A balance would need to be struck between the sharing of information across a broad network of participants and the need for confidentiality and security over some material. Clearly such a proposal will not take root if it is based on stipulations that are highly complex and expensive. An evolutionary approach is clearly required.

Conclusion

In a previous blog covered by the World Policy Journal the author and colleague John Leonardo set out the case for governance reform in developing countries in order to reduce corruption and thereby improve economic performance and public service delivery.

Shifting the balance of responsibility and organising power for governance reform towards developing nations could give this agenda new impetus. An imaginative use of digital technology could enrich the inclusivity and practicality of such an approach.

This is a very tentative proposal. I have not started to discuss whether it would constitute a unified system or a series of ad hoc arrangements; how such a proposal would gain traction; and how the system would be financed. Observations and reactions would be welcome.

David Fellows is Co-principal of PFMConnect.

Thanks are extended to Chris Fellows of ITI Europe for his

views on the application of digital technology.

[1] See this example from a British university: http://www.wbs.ac.uk/courses/mba/distance-learning/teaching/

[2] Commonwealth Africa Anti-Corruption Programme Evaluation – see http://blog-pfmconnect.com/wp-content/uploads/2017/05/Anti-Corruption-Africa-Programme-Evaluation-Feb-2017.pdf

[3] For instance: Horizon 2020 EU programs must include a deliverable called "data management plan" that, in part, describes the kinds of formats that will be adopted within the consortium. See http://www.sussex.ac.uk/library/researchdatamanagement/create/biddingforfunding/horizon2020dataplan and http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf)