

# STATE OF INNOVATION

WELSH PUBLIC SERVICES  
AND THE CHALLENGE OF  
CHANGE

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**Nesta**...

  
Gwasanaethau Cyhoeddus Cymru  
Wales Public Services

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## About Wales Public Services 2025

Wales Public Services 2025 is an independent programme, hosted by Cardiff Business School, looking at the implications for public services in Wales of the profound fiscal, demographic, social and environmental pressures that they face over the next decade and beyond.

The Programme has received funding from the Joseph Rowntree Foundation and the Big Lottery and is undertaking a range of projects in partnership with Nesta, Carnegie UK Trust and others.

# STATE OF INNOVATION

## WELSH PUBLIC SERVICES AND THE CHALLENGE OF CHANGE

### CONTENTS

EXECUTIVE SUMMARY	4
INTRODUCTION	5
THE INNOVATION IMPERATIVE	6
A PUBLIC INNOVATION PRIMER	8
WALES - THE LIVING LAB?	10
THE INNOVATING STATE: PUBLIC INNOVATION IN PRACTICE	16
THE BARRIERS TO INNOVATION	24
WHERE NEXT - AN AGENDA FOR CHANGE?	27
APPENDIX 1: THE INNOVATION IMPERATIVE	30
APPENDIX 2: LATE NATION, EARLY INNOVATION	32
ENDNOTES	35

## EXECUTIVE SUMMARY

**Public services in Wales have to respond to a set of challenges that are unparalleled in the post-war era. The mix of deep and continuing reductions in public spending, a rapidly ageing population, rising health and other costs and a range of far-reaching social, economic and environmental pressures mean that public services as they are now will struggle to deal with the emerging challenges. The services of the future will have to look and feel very different.**

Innovation is acknowledged by many as essential, but while the language of innovation is pervasive, the challenge is how to create the systemic conditions needed to deliver the scale and pace of change required.

The good news is that Wales has a long tradition of public service innovation and many live examples of new developments and ideas, some of which are noted in this paper. There are some national initiatives and programmes which are seeking to promote public innovation but many of the examples of service innovation we have seen are incremental – seldom attaining impact beyond the organisation or initiative in question. Many fewer could be described as radical or transformational – where the whole system is transformed. It is still the exception for service innovations developed in one place to be successfully scaled or transferred nationally. Good practice, bad traveller is a too frequent description. As this report identifies, the issue is what more needs to happen to convert these diverse initiatives into whole-system transformation; ensure that bold ideas are stimulated; successful innovations are mainstreamed across services and that organisations become more driven by the need to innovate.

Many of the barriers to innovation (page 24) are no different in Wales from other countries although some are more acute. Chief among them is a strong sense of isolation among innovators, a feeling that they are often struggling against an anti-innovation compliance culture or simply sheer indifference.

Wales, as a small country with clear values and a public service cluster at its heart, is well-poised to achieve a quantum shift in public innovation. It has the opportunity to define a new approach at the heart of government and public services with the capability to open up and deliver solutions to the challenges ahead. Many of the ingredients are there, but it requires all elements of the system to work together. To maximise this potential we need a new pro-action plan for Welsh public services with innovation at its core, a plan that will:

- Build closer links between universities and public innovation, so that the flow of evidence about successful ideas can be more immediate with a more dynamic two-way exchange between researchers and practitioners, placing experimentation at the heart of government and developing a coherent approach to the national application of proven innovations;
- Develop the next generation of leaders who will perceive innovation as core to delivery and have insight in how to manage the bumpy road that innovation often has to travel;
- Mobilise the capacities within civil society and the private sector to support public innovation more effectively;
- Create innovation budgets within organisations and national challenge prizes so that the commitment to innovate can be matched with resources and incentives.

Underpinning these possibilities is the belief that Wales has the potential to pioneer a new form of experimental government; taking a deliberate and systematic approach to designing the next generation of public services.

## INTRODUCTION

*“ Behind the Victorian façade of a Swansea primary school, a mini-Googleplex is being created whose impact is reaching far beyond the school walls...”*

Public services in Wales are caught in a triple vice. Deep and continuing budget cuts, a growing ageing population and longer-term environmental pressures together represent an unprecedented challenge to the very fabric of services as we know them and, more importantly, the well-being of the citizens they serve. The achievement of marginal efficiencies and implementation of existing best practice alone won't be sufficient for the task ahead. To paraphrase Lloyd George, the chasm we face can't be bridged in a series of small steps.

Many people acknowledge that innovation has to be a fundamental part of the solution and there has been a range of initiatives in Wales around individual aspects of an innovation agenda. Surprisingly, though, much less has been done by way of looking at public service innovation in Wales as a whole.

This short review takes the temperature of public innovation in Wales and draws out some issues and opportunities for innovators, funders and policymakers to consider. It is a joint project between Nesta and the Wales Public Services 2025 Programme, based at Cardiff Business School, with the emphasis firmly on looking forward. It is based on 12 case studies of promising Welsh innovations,<sup>2</sup> a review of existing literature, face-to-face interviews with around 50 practitioners, policymakers and academics, together with a series of three workshops held around Wales.

The review highlights a number of examples of leading-edge public innovation in Wales over the last ten years although it does not pretend to be a comprehensive catalogue – there will be important high potential projects which we have not been able to explore. There is a companion study, *Weathering the Storm*, from Wales Public Services 2025 looking at how other small nations are dealing with the current pressures.

The main questions lying behind these studies are: How can we stimulate the kind of radical thinking that will be increasingly needed? What are the barriers to innovation and the enablers which will help? Are there potentially fruitful areas of innovation which need to be nurtured or stimulated? And what pointers can we give to policymakers and practitioners about scaling up the really promising innovations so that they have national impact?

## THE INNOVATION IMPERATIVE

**Wales has historically been a powerhouse of public innovation. The pinnacles of public service provision – from local education authorities, public libraries and the NHS – have deep popular roots in Wales predating the post-war settlement by more than half a century.<sup>3</sup>**

Although the underpinning support for public service values remains robust, the system as a whole in Wales finds itself confronted by the public sector equivalent of Schumpeter's famous "*gale of creative destruction*":

- We can no longer rely on future economic growth to fund our model of public services. We are still only in the early stages of the austerity programme and its impact will grow with far-reaching reductions in spending on public services over the next five years and maybe beyond.<sup>4</sup>
  - A high proportion of jobs in Wales are within public services, creating significant challenges to the economy and people's livelihoods as the austerity measures take hold.
  - Our private sector lags behind the rest of the UK on virtually every indicator – business starts, R&D, profitability and productivity.<sup>5</sup>
  - Wales already has comparatively more older people than the UK average<sup>6</sup> – the number of over 75s will increase by nearly 80 per cent in the next 20 years. Whatever the mix of positive benefits and challenges this brings, it will certainly have wide-ranging implications for public services.
  - The level of chronic sickness is higher than in England<sup>7</sup> and there are significant health inequalities between local authority areas.<sup>8</sup>
  - Child poverty levels are high in comparison to the other nations of the UK<sup>9</sup> and research shows that Wales is particularly vulnerable to the welfare reforms as they roll out over the next three years.<sup>10</sup> Some are highlighting the risk of levels of destitution not seen in a generation.
  - Though in European terms Wales is poor, globally we too are living beyond our environmental means, storing up long-term problems for future generations.
  - Cultural and social change in a 21<sup>st</sup> century Wales, which is considerably more diverse now than when our approach to public services was first developed, brings with it its own distinctive challenges. People can shop 24 hours a day and stream television programmes on demand while the growth of social media is changing relationships. Societal needs and expectations are in flux and the current models of public services, with their well-recognised weaknesses in capacity and uneven performance, may struggle to respond unless they can embrace a culture of innovation.
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### The case for radically different solutions

It is understood that if spending on health and social care continues to rise in line with the needs of an ageing population and medical advances, the country could eventually arrive at a position where all available public finances are consumed by these alone, leaving nothing for other front-line services such as street cleaning, libraries and leisure centres.<sup>11</sup>

The UK Government Comprehensive Spending Review in 2010 means that Welsh Government funding of £15 billion per annum is set to fall year-on-year at least until the end of 2014/15 with the Chancellor's 2012 Autumn Statement indicating that reductions in spending are likely to continue until at least 2017/18.<sup>12</sup>

In Wales the cuts have been spread more evenly than in England where spending on the NHS and schools has been ring fenced.<sup>13</sup> This means that local authorities in Wales, which have not seen their budgets fall as quickly as in other parts of the UK, currently account for around 27 per cent of spending on public services in Wales. While there are a number of different scenarios, the signs are that the worst is yet to come for Wales especially as the austerity measures and the welfare reforms take hold.<sup>14</sup> Efficiency savings alone will not be enough to bridge the gap between budgets and costs and can often run the risks of shunting costs onto another part of the public sector.

The case for change is not just being driven by rise in demand and reduction in budgets. Citizens' expectations of services have changed. The tradition of 'service givers' and 'service receivers' is outdated and fails to recognise the societal shift that has taken place, where people expect to be much more influential in shaping the services they use and the way that their circumstances are taken into account.

It would be fair to say that our existing public services have struggled to solve some of the most pressing problems of our time. Just as the miners and others at the beginning of the 20<sup>th</sup> century realised that the power to create stronger and healthier communities was in their hands, what really matters now is whether we can unleash the creativity and capacities of the more than 300,000 that work in public services and the three million plus they serve, to innovate our way to a better and more sustainable future.

## A PUBLIC INNOVATION PRIMER

Innovation means different things to different people. The simplest definition of public service innovation is new ideas that work at creating public value.<sup>15</sup> The ideas must be substantively new or involve the application of existing ideas to different challenges into new environments, rather than simply represent improvement; they have to be put into practice, rather than just remaining at the ideas stage; and they have to be genuinely useful.

Nesta uses the model of seven stages of innovation as a way of understanding the different steps in the innovation process. These aren't always sequential: serendipity, power and the allocation of resources all have a part to play. This stage-by-stage approach can, however, prove useful in thinking about the support that innovators and innovations need to flourish and realise their potential.





## Types of innovation

Not all public innovations are the same. Some are about what we do, others are about how we do things, how we work with others in what we do and some are about how we think about things.

The Australian Public Service Network defines six types of innovation in the public sector:<sup>16</sup>

- Policy innovation—a change to policy thinking or behavioural intentions.
- Service innovation—a new or improved service.
- Service delivery innovation—a new or different way of providing a service.
- Administrative or organisational innovation—a new process.
- Conceptual innovation—a new way of looking at problems, challenging current assumptions, or both.
- Systemic innovation—a new or improved way for parts of the public sector to operate and interact with stakeholders.

Different categories of innovation also vary by their intensity, their speed of implementation and the breadth of their impact. Changes can be:

- Incremental – these are about the pursuit of improvements to existing services or processes, but are seldom of wider significance.
- Radical – these are more often about new services or changes to the relationship between providers and service users. They can result in significant change in performance but do not alter the fundamental dynamics of the sector.
- Transformational – often arising from new technologies these result in whole sector reform giving rise to entirely new systems, organisations and structures.

The scale and scope of the challenges Wales currently faces means that incremental innovation alone will not deliver the type of step change that Welsh public services will need in the coming decade. Radical and transformational change is required. Achieving transformational change will necessitate the development of new skills, new tools and, crucially, new mind-sets.

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## WALES – THE LIVING LAB?

How, where and why we innovate today in Wales has roots in our cultural, economic and political history. In Wales these roots run deep indeed and a short history is included as an appendix to this report. This rich past serves as prologue to innovation in post-devolution Wales. Indeed there are few places where the famous metaphor for the advantages of decentralisation – devolved governments acting as “*laboratories of democracy*”<sup>17</sup> – employed famously by US Supreme Court Justice (and socialist) Louis Brandeis would have resonated more than late 20<sup>th</sup> century Wales.

Devolution in Wales, in contrast perhaps to Scotland, focused less on principle and more on purpose. It was the devolution dividend that was centre stage rather than the democratic deficit. Novel ‘Made in Wales’ solutions to the deep-seated Welsh problems of economic underperformance and chronic sickness were the selling points that delivered the Welsh 1997 referendum’s wafer-thin majority.

Devolution was meant to make a difference and this resulted in a clear desire at the centre for policy innovation. Some of this was defensive opposition to English policies like PFI or the NHS’ internal market, inimical to the broad social democratic consensus embraced in Wales by three of the four major political parties. The competitive model of testing and league tables was rejected wholesale in favour of a more co-operative approach.<sup>18</sup>

Some have seen this as a producerist paradigm with ‘little attempt in Wales to build the capacity to innovate.’<sup>19</sup> The question of the capacity for innovation, whether in the form of political leadership or technical expertise, has certainly loomed large in a country that lacked both Northern Ireland’s Stormont experience and Scotland’s strong civil society and powerful legal and medical establishments. The transition to a new creative mind-set was not without its difficulties as one senior civil servant commented:

*“During the Welsh Office days, we were staffed as an off-shoot of Whitehall, relying on the lead department of Whitehall to do the bulk of the legwork. We tuned government policy to the Welsh perspective. We are now being asked to act as a free-standing government.”*<sup>20</sup>

But it would be wrong to assume that Welsh devolution has been an innovation-free zone.<sup>21</sup> The National Assembly was the first in the UK to vote to ban smoking in public places (although not to implement), and the first to raise a levy on plastic bags.

The most prominent of innovations have been a long list of free or subsidised services: the abolition of prescription and hospital car parking charges, primary school free breakfasts, a cap on student tuition fees for Welsh-domiciled students, free concessionary bus travel for the elderly and free swimming for the under-16s and the over-65s.

Many of these Welsh policy innovations were later copied elsewhere and there is some evidence, for example in the case of children’s nutrition and free breakfasts, that they have been successful.<sup>22</sup> Collectively they have been presented as a Welsh model of ‘progressive universalism.’<sup>23</sup> But they have also raised concerns that Welsh devolution was more focused on the work of redistribution rather than the more challenging task of system-wide innovation.

In education Welsh exceptionalism has not consisted solely in the rejection of English innovations. The Welsh Baccalaureate, delivered as part of the Welsh 14–19 Learning

Pathway, in vocational and academic versions is much lauded.<sup>24</sup> The Welsh Foundation Phase, integrating early years and primary education, delaying formal learning until seven, and building a curriculum of learning through play based on the Finnish model is probably one of the more path-breaking policy innovations in the history of devolution so far. A similar approach has been adopted in Northern Ireland, and stands in stark contrast to the English education system's more rigidly structured approach.

One of the reasons for Wales' pioneering role in early childhood and care is the Welsh language, which through the development of the voluntary Welsh-medium nursery school movement *Mudiad Ysgolion Meithrin* from the 1960s on, had given a much higher profile to early-years education here than elsewhere.<sup>25</sup> Another was the emphasis on children's rights and emotional well-being as the cornerstone of policy in large part in response to the widespread abuse in children's homes revealed by the Waterhouse Inquiry.<sup>26</sup>

Wales was the first country in the UK to introduce a Children's Commissioner (a policy later adopted in England, Scotland and Northern Ireland), the first in the UK to formally adopt the UN Convention on the Rights of the Child and the first to make participatory school councils a statutory duty. As with the Ely Hospital scandal (see Appendix 2) a generation earlier, a crisis of legitimacy can often be the catalyst that leads to innovation.

Other notable Welsh firsts include the creation of the world's first Older People's Commissioner and the decision to become the first country in the world to make sustainable development a statutory duty.

Beyond policy in the realm of delivery the close-knit nature of the Welsh public sector means the top-down model of performance management adopted by the UK Government has generally found little traction in Wales. But though the Welsh Government has chosen partnership and persuasion as its principal tools it has been engaged in a decade-long programme of comprehensive public service reform.

The foundational thinking behind the redesign of Welsh public services can be found in three key documents published over a three-year period in the middle of the last decade. *Making the Connections: Delivering Better Services for Wales* (WG, 2004), *Delivering the Connections: from Vision to Action* (WG, 2005) and the *Beecham Report, Beyond Boundaries: Review of Local Service Delivery* (WG, 2006). Though Beecham was ostensibly focused on local government it has been highly influential across the whole of the Welsh Public Sector. At the heart of Beecham was a bold statement of intent. In the words of one commentator it suggested:

*“Wales should aspire to be an example of excellence in small country governance and this required a continuing transformation of the Welsh administration as well as the full range of service delivery organizations.”<sup>27</sup>*

A raft of new bodies were founded to drive forward the new agenda, including a National and 22 Local Service Boards, the National Leadership and Innovation Agency (NLIAH) within the NHS, the training body Public Services Management Wales and Value Wales for public procurement. In 2010 a national Efficiency and Innovation Board was added, with new models of service delivery central to its remit.

The jury is still out on the relative success of the Welsh model of public service delivery. Accurate assessment is, in part, hampered by the lack of readily comparable indicators. The few relative assessments that have been done tend to demonstrate, at best, a mixed picture. Martin and Andrews (2010) argue that overall, residents in Wales had received worse services than those in England after allowing for socio-economic and demographic factors.<sup>28</sup>

The Beecham Review gave the Welsh public sector five years to prove the reforms were delivering. Since then a retreat from a more radical vision of Welsh localism was signaled by the decision in 2009 to shrink the number of local health boards from 22 to seven. Ministerial frustration at poor local performance has led to a number of local education authorities being placed into special measures.<sup>29</sup> The whole future of LEAs is currently under review, and implicit in this is a criticism of the regional consortia that were meant to deliver the Beecham agenda.

It can be said that the devolution dividend in service improvement and public innovation has proven much more elusive in practice than prognosis. The learning curve has been steeper and the implementation gap wider than was hoped or anticipated. Great expectations in Cardiff are still being dashed in Cwmtwrch.<sup>30</sup>

### The fragmented pipeline

In the context of the private sector the idea of national innovation systems – a complex web of interacting institutions spanning industry, government and education – helping a country cope with the challenge of technological change – was developed in Europe by a group of Danish theorists at Aalborg University. A prominent group of Welsh innovation theorists – Philip Cooke, Kevin Morgan and Robert Higgins – adapted this concept to the sub-state level with their idea of Regional Innovation Systems. Cooke describes a regional innovation system as:

*“... a set of institutions, both public and private, which produces pervasive and systemic effects that encourage firms within the region to adopt common norms, expectations, values, attitudes and practices, where a culture of innovation is enforced and a learning process is enhanced.”<sup>31</sup>*

The process of public service innovation is also dependent on a whole set of supporting institutions and the relationships between them.

Among the key components of a public service innovation system are:

- **Policy design and service delivery:** this is the demand side of the innovation system and includes national and local government and other public bodies as the prime utilisers of public service innovation.
- **Research and development:** at the heart of any innovation system is the production of new knowledge and its translation into practically usable forms. University research institutes, particularly those with a strong practice-orientation, are the central element here. But government research institutes, research funders, innovation practitioners and communities of practice are also important.
- **Knowledge transfer:** The diffusion of successful innovations depends upon a system for dissemination. Key supporting institutions here include excellence institutes like NICE and Knowledge Transfer Partnerships. The UK Government recently launched a network of What Works centres with the explicit aim of improving the spread of effective innovations in fields like criminal justice and ageing.

- **Innovation capacity:** the management of innovation is a skill that needs to be nurtured. Professional education and training providers are key, together with specialist units designed to develop creative leadership and innovation practitioners.

To talk of a 'system' of Welsh public service innovation may suggest an element of deliberate design and co-ordination that would be misleading. However, there is a clear appetite for innovation on the demand side and some elements on the supply side geared to delivering it.

Innovation systems as a concept have some similarity to the idea of industry clusters developed by Michael Porter. Clustering can result in greater labour market flexibility and knowledge spillovers where people learn from each other as they move between different elements of the system. Organisations can also reap the benefit from shared infrastructure and support services. In some ways Wales can be said to represent a super-dense cluster for the public services with the potential to mimic some of the advantages achieved by private sector clusters of innovation.

### What are the key elements in the Welsh innovation landscape?

Policy design and service delivery in Wales would encompass the Welsh Government's service departments, NHS Wales, Local Authorities, Local Health Boards, Police Authorities, Fire Authorities, and other Welsh Government Sponsored Public Bodies like the Arts Council of Wales, Sports Council of Wales and Natural Resources Wales.

Under the heading of R&D in Wales we can include the Government-funded soon-to-be-launched Public Policy Institute together with a veritable alphabet soup of university-based research institutes (WISERD, DeCIPHER, CASPP, UPSI, WIHSC, CISHE, HEPRU, HERG, CEBEI, CCYPHW, WTRC, etc.). Think tanks including the Institute for Welsh Affairs, the Bevan Foundation and Gorwel and, indeed, WPS2025; as well as a relatively small number of funding organisations active in Wales like The Joseph Rowntree Foundation, the Waterloo Foundation, The Big Lottery Fund and charities like Save the Children.

Involvement in knowledge transfer is dispersed among a wide variety of organisations including the audit and inspection bodies (WAO, Estyn, CCSIW, Healthcare Inspectorate for Wales) and Sector networks (WLGA; CHCymru; SSIA; WCVA).

Academi Wales, the Welsh public service centre for leadership excellence, is now the main public body responsible for boosting the public sector workforce's capacity in general terms, though in the case of innovation specifically independent consultants like the Kafka Brigade, TYF (twr-y-felin) and BiC Eryri are playing an increasingly dynamic role.

Looking at the overall picture, the Welsh Public Innovation System can be said to possess a number of defining strengths:

- **Political cohesion:** The close-knit nature of the Welsh public sector makes, potentially at least, for a highly co-ordinated system, assisted by approaches such as the Public Services Leadership Group (the successor of the Efficiency and Innovation Board).
- **A research-rich country:** Welsh universities are globally significant producers of applied knowledge in the social sciences,<sup>32</sup> and the Welsh Government is the first in the UK to create a taxpayer-funded independent think tank. Can the country of Cochrane's pioneering work lead the way in the next stage of the evidential revolution?

In other ways, however, the Welsh landscape is characterised by some of the typical features which define weak innovation ecosystems:<sup>33</sup>

- **Organisational thinness:** in the area of capacity building, Wales is weakly endowed with relevant institutions. The task of developing the skills necessary to implement programmes of public service innovation is inadequately resourced, currently falling to just one public sector organisation.
- **Lock-out:** cohesion can become insularity and conservatism. The bonfire of the quangos has, according to one of devolution's major proponents, "*rendered Wales the most State-centric of all the devolved territories.*"<sup>34</sup>
- **Lack of citizen engagement:** whilst there is some evidence of citizen involvement in co-producing solutions in Wales, there is no overall understanding or agreement on the value and practice of citizen engagement. Service users are well-versed in negotiating their way around different aspects of the public sector system and consequently can provide valuable insights into how these can be better connected.
- **Fragmentation:** there is no standardised system for the identification and dissemination of proven innovations and a lack of interaction between and even within sectors. The collaborative portal Good Practice Wales does hold over 1,600 case study notes, but the effectiveness of this model of knowledge transfer is unclear, especially when the most valuable knowledge is often tacit in nature.<sup>35</sup>

This last issue – the fact that good practice is often a bad traveller – was the issue most consistently raised by our interviewees. It was also discussed in depth by the Auditor-General for Wales in his 2011 Review of Public Services:

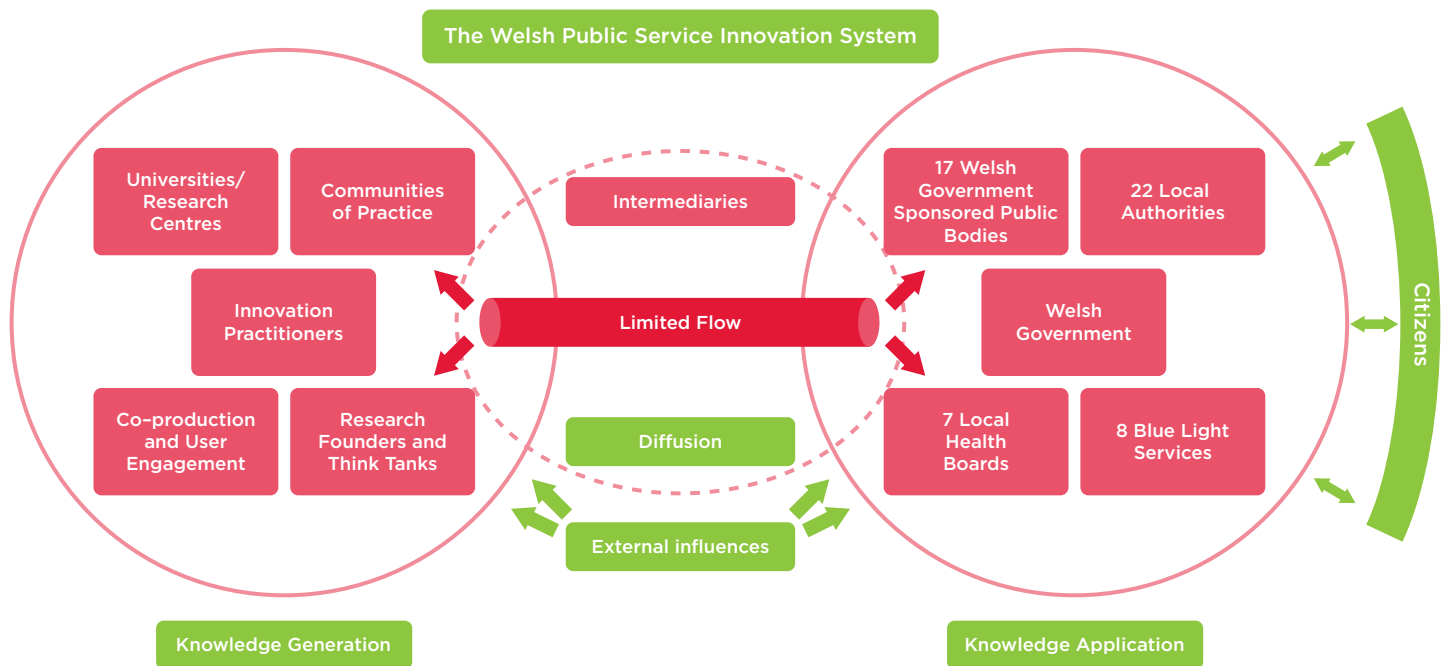
*“...one of the key challenges with good practice is ‘causal ambiguity’ – the fact that it can be difficult to work out exactly what elements of a practice caused the improved results. Getting to the bottom of what might be transferable from one place to another and deliver improvement requires more than simply reading a case study. It requires in-depth discussion and transfer of knowledge and ideas. While there are some communities of practice to transfer and discuss practice, in general, the networks needed for such shared learning are not in place.”<sup>36</sup>*

Figure 1 presents the key elements of the Welsh Public Innovation System. There is an obvious gap in the system between knowledge generation and knowledge application. Wales has a number of knowledge generating projects but does not systemically apply these to real world challenges. There is often a need to broker the flow of information and connect the two sides of the equation. In our model they are currently linked by a narrow pipeline. However, the aspiration is to move towards a model more closely resembling a Venn Diagram, with public institutions overlapping knowledge generation and knowledge exploitation, a set of strong intermediaries and an empowered workforce able to look outwards for insights and ideas and apply these to develop new and creative solutions to the problems they encounter.

To move towards this goal there is a need to work on:

- Greater awareness between the supply and demand side and their respective interests and motivations, including the role of customers/users and citizens in both knowledge generation and co-production of new solutions/services.
- Transferring best practices, in particular through social knowledge exchange.
- Development of cross-sectoral innovation networks.
- Injecting creativity and accelerating information flow via boundary-spanning intermediaries.
- Cultural change and capacity building to ensure that people working in the public sector are given the tools, knowledge, skills and permission to turn ideas into practice.

**Figure 1**



## THE INNOVATING STATE: PUBLIC INNOVATION IN PRACTICE

Can Wales innovate in public services? Our short exploration of the public service landscape in Wales over the last decade proves that we can. Wales boasts a number of world-leading examples and continues to produce a cadre of public innovators capable of generating new waves of transformative action. Using the seven-stage model of innovation introduced on page eight, however, we can see that only a few promising Welsh innovations have begun to have impact at scale, and fewer still could yet claim to have delivered sustained system-wide change.

### Exploring opportunities and challenges

Confident, creative leaders learn to allow ideas to emerge.<sup>37</sup> Central to this spirit of collaborative innovation is the need to develop the thinking space that allows those working in the public services to step away from day-to-day delivery pressures, engage with citizens and with future challenges and opportunities in a much more meaningful way. Public services tend to be traditional hierarchies and, for the most part, employees will not take a risk in innovating without a mandate from the top. Conversely, when staff have a sense of ownership of the problems combined with autonomy to work on solutions to the things that frustrate them then results are more likely.

**Monmouthshire County Council**, one of six local authorities in England and Wales working with Nesta as part of the Creative Councils Programme,<sup>38</sup> is trying to place these values of open and grassroots innovation at the core of its organisation, supplanting the rigid rule-bound culture of a traditional local authority. The catalyst for this change was the Council's belief, as articulated by its senior management, that it had become too removed from the people it served; that it had become risk averse; and was preoccupied with process at the expense of better outcomes. Monmouthshire has created a programme, which it calls Your County, Your Way, aimed at reigniting the passion that its staff had when they first entered public service and giving them the permission to work in different ways.

Your County, Your Way does not in itself deliver better outcomes. It's about creating the conditions in which other projects can flourish. The approach has five elements: an intrapreneurship school to help staff in the public space think more like entrepreneurs, pursuing their ideas and focusing on what matters rather than organisational bureaucracy; getting better at listening to and engaging with citizens; looking globally for ideas that can transform public services; creating an agile and networked organisation that sweeps away the symbols of power and hierarchy, giving staff the technology and permission to work wherever and whenever they need to get the right results; using systems thinking to eliminate unnecessary waste and ensure that staff are delivering the things that really matter to the people they serve.

### Generating ideas

Public innovators need to be able to engage with and understand people's actual lived experiences. After all it is people who are intended to be the ultimate beneficiaries of the hoped-for innovations. In Wales the time banking movement in particular (see Box 1) has highlighted the rich and still largely untapped reservoir of ideas, knowledge and energy that are to be found among the population at large. In this way innovations in process, for example through the use of interactive technology, can lead to important innovations in service.

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**VocalEyes** is just such a digital innovation, developed by social entrepreneur Peter Anderson, to give users the opportunity to ‘vocalise’ their ideas at an early stage, allowing others in the community to debate and develop them. Pembrokeshire College has been an early adopter of the system where students’ ideas are posted, rated and discussed, enabling the senior management of the College to identify what is trending and have a meaningful discussion about what the students really want, feel and need; it has already generated a databank of over 23,000 interactions in the first year or approximately 200 a day.

### BOX 1: TIME BANKING WALES

Wales is an acknowledged global leader in the field of time banking. The concept of co-production more generally is developing strong traction, with an emerging and active co-production network in Wales, supported by the new economics foundation and Nesta.

In the case of time banking specifically, the Wales Institute for Community Currencies was established in 2003 as a collaboration between the University of Newport, Time Banks UK and Valleys Kids. It quickly developed into an international centre of excellence, spawning two organisations: **Spice** develops agency time banking systems for communities and public services focused on spreading the model across the UK and internationally, while **Timebanking Wales** aims to deepen the roots of reciprocity here in Wales. TBW is a person-to-agency time banking model focused very much on the idea of generating active citizenship, or ‘social energy’, strongly influenced by the co-production ideas of the American activist Edgar Cahn. It aspires to be a means to redesign public services and transform the relationship between citizen and state from the service provider and passive service user model to one of active reciprocity.

In the Valleys communities where the idea has taken hold, the results have been impressive. In the Blaengarw Time Centre 60,000 person-hours of engagement by 1,000 members mean the local Creation Development Trust has one of the highest levels of community involvement per capita anywhere in the country. Timebanking Wales has worked with youth services, housing associations and environmental bodies in building a new civil infrastructure of trust and mutual benefit. The organisation has recently been awarded £1.8 million by the Welsh Government to build community networks in the South Wales Valleys that will foster a new entrepreneurial culture and help create growth in areas which have previously been dependent on heavy industry.<sup>39</sup>

Those with different histories and groups of professionals from different sectors will have different perspectives which can help innovation flourish. Developing a new way of understanding citizens’ views, can act as a stimulant to creativity, pushing people out of their comfort zones exposing them to new data, different ways of thinking, leading to new solutions that are more focused on the end user rather than the processes and structures of individual organisations. **The Gwent Frailty Project** is one of a number of programmes

in Wales beginning to reap the benefits from integrated health and social services teams – different professional groups working together to provide early intervention at times of crisis.

This pioneering change programme is a partnership between the five Gwent local authorities, Aneurin Bevan Health Board and the voluntary sector. The approach recognises that in some areas treatment within the acute sector is not or is no longer needed or is counter-productive to helping people achieve independence. The frailty model started by recognising the failings in the current systems and accepting that continuing along the same path would lead to absorbing cuts with cost shunting between health and social care as each protected its own budgets at the expense of developing a seamless service for older people.

Through the programme, services in primary and community care within localities are being re-shaped around the care needs of people, improving the quality and sustainability of services through an integrated delivery model. This means that staff, including nurses, social workers, occupational therapists and home carers becoming part of a single Community Resource Team that is helping people to remain independent. The initial investment to set up the approach has been secured from the Welsh Government Invest to Save scheme.

At the other end of the age spectrum one of the biggest problems facing society is the risk of a lost generation. Twelve per cent of young people in Wales are not in education training or employment, often referred to by the acronym NEET.<sup>40</sup> Research shows that the lifetime cost of each of these young people to UK public finances is £104,000 which includes lost wages and productivity.<sup>41</sup>

Public Sector partners in Swansea and Wrexham, have achieved some of the best – and most improved – performances in Wales in terms of reducing the proportion of young people not in education, training or employment in recent years.<sup>42</sup> These two separate projects from opposite ends of Wales have shared a number of common characteristics. They have focused on using practitioner and data-led approaches picking up on factors such as behaviour; poverty; attendance; looked after status and reading skills to identifying those most at risk, with sharing information between partners an important part of the activity. These approaches have not drawn on significant extra funding. They have used existing resources differently, focusing on earlier involvement and support. This includes Keeping in Touch teams who work with those young people at greatest risk of not achieving a positive placement to help them shape their employment future. Partners in Local Service Boards also agreed to increase the supply of work placements.

### Developing and testing

The Welsh public sector spends over £4.3 billion every year buying or commissioning goods and services from third parties. This accounts for nearly 10 per cent of Welsh GDP with the largest slice of this coming from the NHS and local authorities. Despite a recent 40 per cent reduction in capital budgets there remains a real opportunity to leverage community benefits from procurement, with the use of local employment clauses and placing business with local firms helping them to grow.

This has been an area in which the public sector in Wales has learned the skills of rapid prototyping, testing and development. Some of the best examples are the Arbed energy programme which aims to reduce fuel poverty and the *Can Do* toolkit which is a practical guide to help procurement professionals generate community benefits from their public contracts.

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The toolkit itself emerged from a group of professionals who resisted what they considered to be a risk averse culture within the civil service and Value Wales agency.

*“A positive procurement path was opened up for the public sector by harnessing the energy, passion and the knowledge of professionals from civil society and implanting them in a ‘skunkworks’ in government.”<sup>43</sup>*

The Arbed scheme was one of the first to benefit from this new approach, creating new training places for the long-term unemployed by putting in place the positive procurement policy. It went on to win the 2011 British Renewable Energy Award in 2011 for most innovative regional initiative.

All innovation carries risk and in the public sector ideas are exposed to public scrutiny at a much earlier stage than is the case for the private or third sector, while the risks of failure – in terms of impact on people’s lives – can be much higher. The regulation and scrutiny of public services needs to be organised in such a way that ideas and prototyping of early-stage innovations are encouraged and some degree of failure is accepted as a necessary by-product in the development of new service models.

### Making the case

Clear and transparent metrics are essential in evaluating the success of new programmes and aiding their dissemination. Often pilot programmes will not be evaluated until they have reached their conclusion, running the risk of delay before a decision can be made on widespread roll-out which then results in a loss of momentum.

A good example of the critical role of research and evaluation in fast-tracking innovation is the Cardiff domestic violence project **Safer Wales**. Established in 2001 by Jan Pickles – with a small one-off grant from the Home Office as Wales had been left out of their domestic violence programme – the Cardiff Women’s Safety Unit has become the best-practice model for domestic abuse advocacy work within the UK. WSU was able to build on a history of progressive initiatives in domestic violence in Cardiff – e.g., Cardiff was the first place in the UK to transfer the burglary successful ‘target-hardening’ principle to victims of domestic violence and hate crime.

Now part of Safer Wales, the WSU is a multi-agency partnership working with victims of domestic abuse and known-perpetrator rape – a one-stop shop and fast-track service with impressive results captured in real-time by a series of evaluations by Cardiff University’s world-leading criminology department.<sup>44</sup> Repeat victimisation fell from 30 per cent in November 2001 to just 8 per cent three years later, reducing harm and reducing cost, and probably saving lives. The first MARAC (Multi-Agency Risk Assessment Conference) was held in Cardiff in April 2003, and this impressive record of progressive innovation has gone on to include the creation of the DYN project aimed at male victims of domestic abuse. A similar story of universities’ role as motors of innovation, also in the context of violence reduction in the Cardiff area, is set out in Box 2.

**BOX 2: CARDIFF VIOLENCE REDUCTION**

In 1996 Professor Jonathan Shepherd founded the prototype Community Safety Partnership, after noticing from his research in Bristol and South Wales that much of the demand placed on Accident and Emergency departments particularly at night and at weekends was due to alcohol-related harm. It was also apparent that most violence which results in emergency treatment does not appear in police records.

The Cardiff Model for Violence Prevention developed by Professor Shepherd uses anonymised information obtained from patients about the precise location of violence, weapon use, assailants and day/time of violence. The CSP combines information from Accident and Emergency departments with police data to produce a regularly updated list of violence hotspots, violence times and weapons used. This approach has been found to be effective in clinical trials carried out by Professor Shepherd's research team and evaluators in the United States. This brought about an immediate decline in facial injuries connected to alcohol in Cardiff, as the amount of drunken crime was been cut by 20 per cent in seven years.

Interest in evidence-based policymaking extends deep into other areas of public policy. Wales, with its high concentration of chronic disease, has long been at the forefront of public health promotion initiatives. Heartbeat Wales, probably the most celebrated example, was founded in 1985 as a community-based project to promote a heart-healthy lifestyle. Though evidence five years on did show a rapid uptake of the targeted healthy behaviours, poor project design meant it was impossible to say to what extent the intervention was the causal effect. Learning from this experience Wales has since developed an internationally-recognised research capacity in the evaluation of public health policy.

This has culminated in the formation of the Public Health Improvement Research Network (PHIRN), funded by the National Institute of Health and Social Care Research, which acts as a bridge between public health academics, policymakers and practice organisations in Wales. Research that has developed out of PHIRN has included evaluations of the Free Primary Breakfasts Initiative, the National Exercise Referral Scheme and the Kids, Adults Together programme to reduce alcohol misuse. These have informed policymaking at the national level.

Centres of excellence that are capable of codifying and transferring knowledge through training and research dissemination can help the diffusion of innovation throughout the system. A recent development in this area is the creation of four What Works centres by the UK Government. These have been created with the aim of improving the links between supply, demand and use of evidence in four policy areas – activity and ageing, early intervention, policing and crime and local economic growth – enabling ranking of the effectiveness of public interventions and better targeting of resources.

**Delivering and implementing**

Looking outwards towards other organisations, sectors, countries, and technologies allows people to access wider professional learning communities. Change is often fostered by taking existing ideas and technologies and re-translating them into different contexts for

new uses. This collision space – between people and ideas from disparate fields – can be fertile ground for leading-edge innovation.

The **High Reliability Schools** programme, which began in 1996, is the only example in the world of district-wide secondary school improvement in a socially disadvantaged area that has been sustained for almost two decades. Initiated by a team of Welsh and American academic experts, this project took the 11 core principles of high reliability organisations – critical operational services like air traffic control, electricity grids or nuclear power stations where the costs of failure are too catastrophic to contemplate so reliable and invariably high standards have to be the norm – and applied them to 11 secondary schools in Neath Port Talbot, one of the most disadvantaged local authority areas in Wales.

The results have been impressive. In 1996 Sandfields Comprehensive was achieving a 13 per cent rate of A–C achievements at GCSE level. The second school to join the programme, Cwmtawe Secondary School, similarly socially disadvantaged though it could boast a new school building, was achieving good GCSE results of just 32 per cent. Both these schools continued to use high reliability principles independently after the programme ended. By 2011 the high achievement rate in Sandfields had reached 54 per cent, close to the national average despite it being significantly more disadvantaged. Cwmtawe's rate meanwhile had climbed to 93 per cent, among the highest in Wales. Both schools have been awarded excellent status by Estyn in their most recent reports. This general pattern of improvement can be seen across the whole of the Neath Port Talbot Local Authority. Over half the schools are in Band 1 and no school is in the lower two bands. The overall rate of improvement in HRS schools over a 16 year period has been two and a half times the national Welsh rate, a sustained rate of improvement unparalleled anywhere in the developed world.

### Growing and scaling

The islands of innovation in the Welsh public service, by and large, remain precisely that: pockets of good practice that never achieve significant scale. Some do, however, escape their local context to achieve replication at a national scale.

Wales is, for example, the first country in the world to have conducted a national roll-out of an evidence-based early intervention programme, the **Incredible Years**, first developed at the University of Washington in Seattle, then adapted and developed for the Welsh context at the Centre for Evidence-Based Early Intervention at Bangor University.<sup>45</sup> CEBEI is quoted by Ben Goldacre, *Guardian* columnist of *Bad Science* fame, and co-author of the Cabinet Office's recent paper on Randomised Control Trials as one of the few examples of good science because of its rock solid evidential basis.

In 1999 Professor Hutchings convinced SureStart providers to introduce Incredible Years as a methodology. Unlike in the rest of England and Wales the 11 North Wales Sure Start projects followed the same IYP approach which meant an RCT evaluation involving three-to-four year olds identified as vulnerable was funded. The evidence showed results that were as successful as those of the programme's original developers with significant decreases in child hyperactivity and inattentiveness and parental stress and depression, achieved at reasonable overall cost.<sup>46</sup>

This early success led to further expansion of the Centre's work into child–teacher interaction. By 2012 Welsh Government funding was in its seventh year, and 13 years on since its inception 300 groups across Wales were now delivering IYP, across 21 local authorities for the classroom management programme and 20 for the child and parent programmes.

Another innovative educational project, the LIFE programme (see Box 3), which began in a Swansea school just three years ago has been rapidly rolled out, first across the city and now across Wales. But many excellent examples of public innovation remain disconnected from the system as a whole; rich sources of inspiration but not easily transferable templates of success. **Hafod Primary School in Swansea** for example uses art, philosophy and comparative religion to build emotional literacy and creative thinking as foundations for primary learning. Led by its charismatic Headteacher, Rachael Webb, this school where 93 per cent of the intake live in areas of the highest level of disadvantage and 55 per cent of pupils, mainly Bangladeshi, have English as a second language, achieved Grade 1 in all areas in its latest Estyn Inspection.<sup>47</sup>

In Hafod the curriculum each month is based around a different core value, pupils evaluate teachers, and the school's corporate plan is to be found in mind maps which adorn the walls of the staff room. Each inch of the school is utilised to create spaces for learning, meditation and exercise – including an outside community gym. In many ways Hafod incorporated the seeds of the Reggio Emilia approach<sup>48</sup> – with its emphasis on designing learning environments – but explosions of colour are used to contrast with the grey skies of Swansea, rather than the white neutral walls of northern Italy. It has become a site of professional pilgrimage for teachers across Wales in search of inspiration. But the tools to scale up this remarkable site of innovation are simply not readily to hand.

More problematical still is the final stage in our spiral of innovation. Apart from the Foundation Phase in education referred to above, the challenge remains to turn successful innovations into system-wide change.

### BOX 3: LIFE PROGRAMME

Behind the Victorian façade of a Swansea primary school, a mini-Googleplex is being created whose impact is reaching far beyond the school walls. Now every K2 pupil has their own iPad, and will soon be able to take them home as long as they bring them back the next day; every class has an Apple TV. The success of **the LIFE programme** has meant Casllwchwr becoming the first Welsh Primary School to win the Third Millennium Learning Award. They won a Highly Commended NAACE Award last year, and have been nominated for a further two awards this year. In terms of educational outcomes the 37 per cent achievement gap in English at L5 for boys in 2010 has been closed in just two years. The percentage of pupils achieving L4 in KS2 has increased from 71 per cent in 2008 to 90 per cent in 2011 (cf. 76 per cent for its family of schools).

At the core of the LIFE philosophy is the concept of inter-generational learning. Mobile technology, Headteacher Simon Pridham believes, is a platform for empowering pupil, parents, teachers, teaching assistants, parents, grandparents and 'intergenerational learners'. Six-year olds are teaching 65-year olds how to use Google through the Skillshare project, and the elderly are in turn passing on transferable skills such as knitting to the young.

Backed by the City's Head of Strategic Performance the LIFE programme has developed into a flagship digital brand for the city across a wide range of public policy objectives e.g. a new project seeking to identify technology's role in working with children with autism. Equally impressive has been the wide range of partners that have been engaged, from the two local universities, Swansea and Swansea Met, through to S4C who, in partnership with the LIFE Programme, are now investing £50,000, in a digital talent academy where the most promising 11-year old 'digital wizards' will develop literacy and numeracy apps in the Welsh language (currently a market gap) which will then be capable of being resold in other language markets globally.

One of the reasons that costs in public services tend to rise quicker than across the economy as a whole is the relatively low proportion of output that is accounted for by capital.<sup>49</sup> The productivity of capital rises at a quicker rate than that of labour. The introduction of new technologies can be a key driver to innovation with the potential to close this gap. Yet while digital technology has led to huge transformation in a vast array of industries including retail, insurance and travel, we have yet to see similar impact in public services.

ICT can simplify and improve the way in which citizens access information about services and can also be a direct alternative to face-to-face provision for transactional services such as planning which can improve hours of access and the user experience as a whole. Technology can also be a catalyst for a change in relationships as the LIFE programme in Swansea amply demonstrates.

## THE BARRIERS TO INNOVATION

As the preceding section has illustrated Welsh public services have a long and proud track record of innovating, a tradition that continues to this day, albeit in small pockets. Why is innovation not more widespread? Many of the barriers that public innovators in Wales face are fairly universal. They are summarised in Box A and will be familiar from the existing literature:<sup>50</sup>

### BOX A: INNOVATION BARRIERS

**Structure and hierarchy:** Large organisations, like cells in the human body, have evolved to be self-sustaining and can perceive innovation, particularly radical innovation from outside their own structure and hierarchy, as a threat.<sup>51</sup>

**Silo mentality:** Most public organisations tend to operate as silos that act as barriers to sharing ideas, different professions and services do not always get the chance to come together and step back from the boundaries of their professional roles.<sup>52</sup>

**Risk aversion:** Staff in public services can see innovation as a challenge to the way they work; in some instances they will be averse to changes in their job roles.

**Rewards:** Professionals who deliver a service with a track record of success have little personal incentive to decommission that service and put alternatives in place. Meanwhile radical service change is likely to attract unwelcome attention from service users, local media and politicians.

**Scrutiny:** The need for public accountability, clear standards and continuity of service can contribute to the culture of risk aversion, with professionals avoiding all risk rather than embracing it as part of the journey to radically different outcomes.

**Investment:** Investment in public sector innovation lags behind that in other sectors.

**Separate worlds:** Research and practice exists in separate worlds with some rare exceptions. This contributes to the lack of evidence to support the roll out of innovative practice that does emerge from the front line of public service.

**Short-termism:** Day-to-day pressures and administrative burdens mean that many staff spend their time dealing with only short-term planning and operational matters with little spare capacity to step back and think about doing things differently.

**Political:** The political cycle compounds short-term thinking by demanding instant results rather than looking towards potentially more effective longer-term interventions. The adoption of the Foundation Phase in primary education may have long-term impact on achievement but this will only become apparent over a ten to 15 year period. This makes it difficult to present evidence of success during a single term of office.

**Access to evidence:** Clear metrics are vital to demonstrate success and increase the likelihood of diffusion throughout sector, yet public service innovations are difficult to measure and define.



**Knowledge transfer:** Even where an organisation is actively adopting ideas from elsewhere, the organisational learning during the process of innovating has created a tacit knowledge that cannot simply be bottled up and sold on. One example of this is the High Reliability Schools programme. Incredibly successful in Neath Port Talbot it failed to gain any traction when adopted by a neighbouring authority.

Is there a set of specifically Welsh barriers to new thinking and innovative action in the public sector context? Some of our respondents seemed to think so.

Wales has high numbers of people who are dependent on public services for their livelihood. Career progression and the pay structure in the public sector do not reward innovative behaviour.<sup>53</sup> The penalties associated with failure can far outweigh the rewards offered for success with long-term career structures based on 'time-served' rather than impact.

This issue is compounded in Wales where lower private sector employment can make public servants more fearful of losing their jobs as alternative career choices are less readily available, favouring a slow and steady approach over radicalism and risk taking.<sup>54</sup> There is also a theory that the most effective people tend to move jobs more often leaving behind staff who are less motivated to change the existing practices and systems. This can lead to a perpetuation of risk-averse cultures as custom and practice becomes self-reinforcing.

Leadership is vital to overcome the tendency towards inertia yet some would argue that Wales lacks a creative leadership tradition in the public management context. Those at the top of organisations must be clear on and communicate the need for change, unleash the inherent knowledge, passions and creativity of staff and learn from best practice globally while working with citizens to allow them to shape decisions and co-design and create services. When good models are identified it is unclear whose role it is to ensure that they are adopted throughout the nation. The Gwent frailty model is currently attracting plaudits for its approach in integrating health and social care and keeping older people independent, yet the take up of similar approaches is sporadic.

With some notable exceptions, interviewees felt that innovation in Wales tends to be seen as distracting people from the basic job of service delivery, unlike in England where it has been commented that there is a culture which looks more favourably on novelty and experimentation.<sup>55</sup> Our public services are not lacking auditors, regulators, advisors or improvement agencies and they have all played their role in driving up traditional measures of performance.

Audit and inspection of Wales public services cost over £34 million.<sup>56</sup> The regulatory model focuses on comparisons with existing good-practice models and many argue that it seldom offers positive views on groundbreaking but unproven schemes, something that can lead to risk aversion and a perpetuation of current operations at the potential of newer alternatives.

Staff in public services have commented that they spend hours producing measures of processes and complying with audit checklists rather focusing on new and better ways of delivering services.<sup>57</sup> This approach can lead to prioritisation of an organisation's reputation in the eyes of regulators rather than its reputation among the people who use its services.

When measured in terms of performance indicators it is possible to demonstrate that services are improving but this can sometimes be a case of doing the wrong things better.

Innovation thrives in the context of a multiplicity of potential investors but these are markedly absent in Wales. The Welsh Government dominates the funding landscape to the exclusion of all else. Its flagship Invest to Save programme has allowed a number of schemes offering long-term payback to begin. These would otherwise have fallen foul of annual budget cycles. However, the scheme is one which backs winners, rather than cutting edge innovations with a higher risk of failure. Overall the funding monoculture in Wales is not conducive to creating a marketplace of ideas.

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## WHERE NEXT - AN AGENDA FOR CHANGE?

**Wales is fortunate to find itself endowed with a particular set of advantages that mean it has the potential to be a global pioneer in public innovation:**

**Wales has one of the largest public sectors relative to population size of any European country.** This is traditionally seen as a weakness – and it is indeed indicative of the relative failure of the private sector. But, at a time when health and education globally are two of the fastest growing economic sectors, this long-standing public service specialisation could prove a future source of competitive advantage. From an industry cluster perspective, Wales could become a sophisticated test bed for public service innovation.

**We have one of the strongest social science bases for any country of our size.<sup>58</sup>**

Associated with this is a deeply embedded tradition of evidence-based policy and practice. Wales was the backdrop to Archie Cochrane's groundbreaking study of efficacy and Julian Tudor-Hart's development of evidence-based medicine in the context of anticipatory care.

**There is a strong tradition of public and social innovation.** Greater social cohesion, lower inequality and a strongly democratic culture have produced a disposition to collaborate for mutually beneficial ends. This reservoir of social capital means the potential of co-production has a particular resonance in Wales.

**Like many small nations, Wales is the ideal size for systemic innovation** – big enough to scale beyond the purely local, but small enough to organise a coherent national strategy. The 'Wales Effect' – the common sense of belonging, the strong personal relationships between the main players, the much shorter communication distances between national government and local delivery and close connections between policymakers, practitioners and academic institutions – could be the foundation for a radical programme of transformational change.

Taken together this combination of assets – the presence of a public service cluster, a social science knowledge-base, strong social capital and our mesoscale – mean that Wales has all the ingredients to become a global leader in experimental government, setting a new standard for how public services systematically innovate, experiment and apply what works. Wales certainly has the potential. What is not clear is whether it is able to orchestrate these assets in a systematic fashion.

There is a pipeline of public and social innovation in Wales – but good ideas are often blocked from spreading, growing and replicating. In other words the public sector is poorly equipped to "*recognize the value of new information, assimilate it, and apply it*", exhibiting what in the business context would be called a low absorptive capacity.<sup>59</sup>

More fundamental again than our ability to scale is the much broader question of whether Wales as a nation is systematically and deliberately organising to innovate, exploring big challenges, reframing problems to understand them better, developing creative ideas, then testing, prototyping and scaling them in turn. Though our sister report, *Weathering the Storm*, is disappointed by the lack of strategic, whole-system approaches to change in the countries that it studied, many governments are investing strategically in innovation. Australia, France and Denmark have all established government-based public service innovation labs and French local government has established the public policy laboratory, The 27<sup>th</sup> Region. The UK Government has also experimented with initiatives like the Behavioural Insights Team and the Government Digital Service – deliberately creating skunk works teams, bringing in different perspectives to drive innovations.

In general terms Wales currently lacks a coherent, fully co-ordinated public innovation system. What would be the defining characteristics of a well-functioning system?

**Knowledgeability:** An awareness of what works, both in Wales and globally and effective ways of evidencing this.

**Experimentalism:** The willingness to try out new approaches and accept that we won't get it right first time.

**Diversity of ideas:** Helping others to innovate, whether this is through co-creating solutions or opening up data and other opportunities to others who may be able to add civic value.

**Scaling and replicating:** Once the evidence is understood the ability to mobilise resources and scale up the ideas that work.

None of these are sufficiently widespread and there needs to be a serious debate within Wales public services about how these characteristics can be fostered.

## PROPOSALS - FOUR FOR THE FUTURE

This paper has identified a number of challenges that require fresh impetus and a whole-system response. Although currently fragmented, there is existing capacity in the system which could be mobilised to turn the efforts of enthusiastic but often isolated innovators into more long-term systemic impact.

A drive to embed innovation in public services would need to be underpinned by a national action plan. Among other things this might encompass:

- Bringing social science research and public service practice closer together in order for them to collaborate, prototyping the public services of the future and generating the evidence of effectiveness that would enable them to be replicated at scale and pace.
- Making innovation skills centre stage in management and leadership programmes in order to create a cadre of leaders across Wales' public services who create a new vision for public services, turning innovation into a practical process, empowering staff and giving them the tools to turn learning and theoretical ideas into better outcomes.
- Building a more inclusive approach to innovation by engaging the third and independent sectors to mobilise the gifts and abilities of the population to deliver public value, for example through co-production. This also has the potential to create a more entrepreneurial culture that could drive up productivity through the creation of new micro-enterprises as local people develop new services in and for their communities.
- Incentivising new partners in the private sector, such as technology providers, to turn Wales into a global test bed for those wishing to develop innovative solutions in the public realm, for example in digital education and technological solutions to the challenges of ageing.

There are also some questions that require further exploration from public service leaders:

- Do public services need to set aside a dedicated innovation fund? Companies typically spend 2 to 4 per cent of their GDP on research and development activities to create the growth of tomorrow. We need to understand the appropriate level for public services.
- How can challenge prizes and other open innovation methods be used to mobilise existing capacity to develop solutions to some of the wicked problems faced by communities and services?
- How can we ensure that there is more systemic global scanning for promising ideas that are tackling societal problems? We need to identify an organisation which will take responsibility for harvesting and disseminating this knowledge.
- How would the regulatory model need to change to strike an appropriate balance between intolerance of underperformance and tolerance of risk, combining the role of public spending watchdog with that of a body that scrutinises failed innovations to nurture knowledge and further learning without apportioning blame.

## APPENDIX 1: THE INNOVATION IMPERATIVE

### Social and demographic picture

**The population of Wales is forecast to increase by more than 7 per cent from 3.03 million in 2012 to 3.27 million in 2025.<sup>60</sup> Nearly a fifth of the Welsh population are over 65, a higher proportion than the UK as a whole; by 2025 this gap will have widened further.**

Despite high levels of investment in healthcare, Wales also suffers from worse health than large parts of the UK; 26.6 per cent of economic inactivity is due to long-term sickness compared to 22.0 per cent; while 8.7 per cent of people of working age claim incapacity benefit compared with 6.3 per cent across the UK.<sup>61</sup>

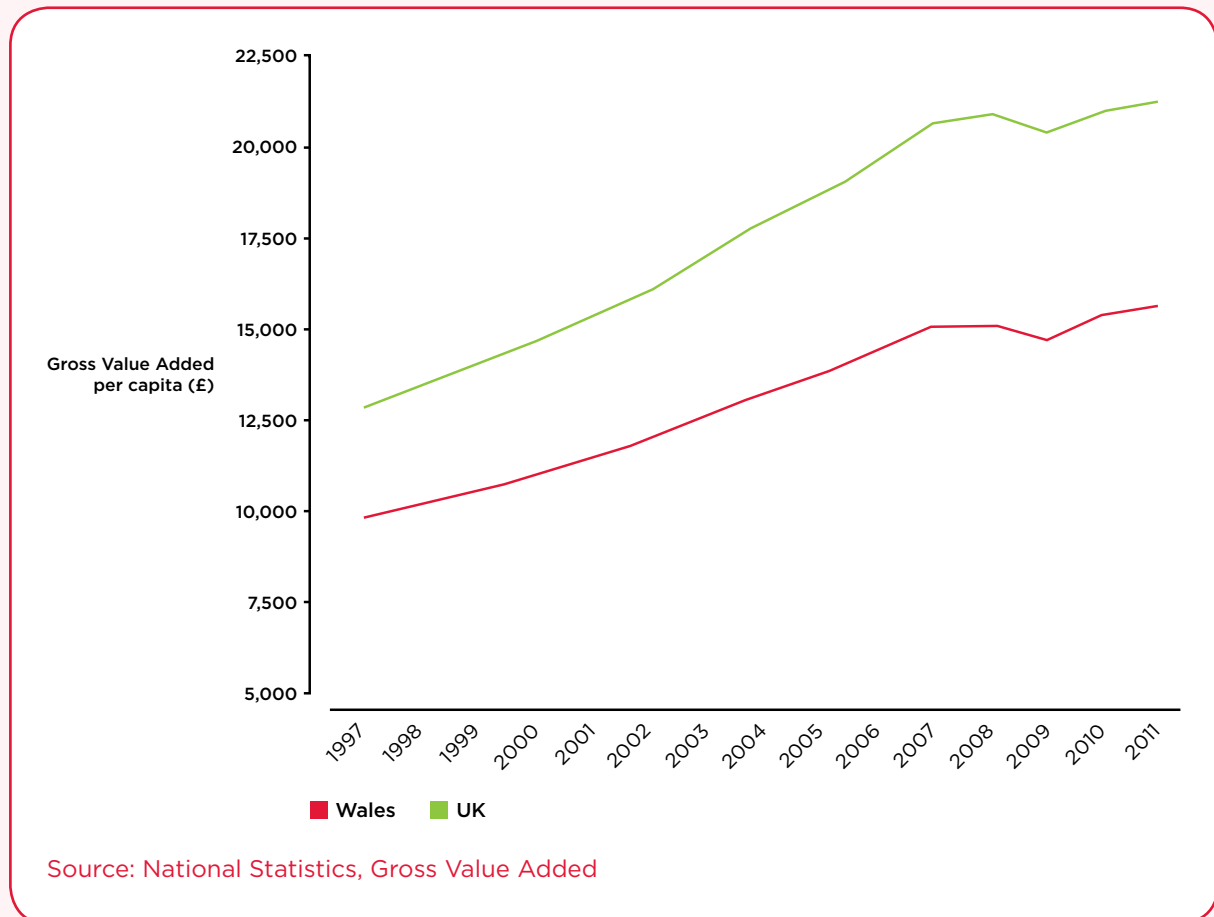
Average life expectancy in Wales is 77.6 years for men and 81.8 years for women.<sup>62</sup> This has been increasing, but not as quickly as it has been in the UK as a whole. The improvements also mask widespread variations across health board areas with life expectancy at birth ranging from 75.6 years in Blaenau Gwent to 80.4 years in Ceredigion.<sup>63</sup>

### The economy

The fundamental problem facing the Welsh economy is the per capita income gap with the rest of the UK economy, a gap that has worsened considerably over the last 20 years. It is not always easy to differentiate between symptoms and causes but other phenomena that can be linked to this underlying problem include: the lack of an indigenous entrepreneurial base; an over-reliance on public sector employment; the lack of higher value-adding sectors and jobs e.g. in financial services; and the loss of manufacturing jobs to Eastern Europe and Asia as a result of globalisation.

Welsh Gross Value Added (GVA) per head of population grew at 1.9 per cent in 2011, the third highest of any UK region. However, the total of £15,696 is still the lowest in the UK and significantly behind the UK average of £20,873.<sup>64</sup> In the ten years following the advent of devolution Wales was the slowest growing region in the whole of the UK. Earnings in Wales also lag some 9 per cent behind the UK average.<sup>65</sup> Wales has a large public sector, accounting for 25.7 per cent of jobs<sup>66</sup> and public expenditure accounts for an estimated 69 per cent of GDP.<sup>67</sup> There has been an increase in jobs created in the Welsh private sector since 2009 but many of these jobs are part-time or low skill. Welfare reform meanwhile will significantly reduce the purchasing power of households placing further pressure on a beleaguered economy and third sector safety nets such as food banks.<sup>68</sup>

Figure 2



## Natural resources

Wales has access to abundant renewable resources such as wind, wave and tidal energy, but these are not enough to make us self-sufficient in total energy consumption at present. Rising global demand for fuel and materials costs will place huge pressures on the resources available to meet our everyday needs, driving up costs. Large numbers of people are already experiencing fuel poverty.<sup>69</sup> The rural nature of large parts of Wales and limited public transport infrastructure increases reliance on private car journeys which will become more costly as the price of oil increases. In 2014 Wales will become the first county in the world to embed a legal duty to put sustainability at the heart of government, with a need to ensure that the triple bottom-line of environmental, social and economic objectives are targeted by equal measure.<sup>70</sup> Policy aspiration in this regard in all probability currently outstrips our capacity to deliver.

## APPENDIX 2: LATE NATION, EARLY INNOVATION

**Wales has a grand tradition of innovation for the common good. This was no historical accident. Necessity was the grandmother of Welsh invention. Central government's passivity and distant nature, in geography and culture, left a vacuum that invited local action. Mass poverty meant alternatives simply had to be created through collective endeavour. While this was equally true of other parts of the UK, the social glue of language, religion and class in Wales allowed these local initiatives to coalesce and scale.**

The earliest example of this 'Wales Effect' is Carmarthenshire vicar Griffith Jones' 18<sup>th</sup> century system of circulating schools, the world's first successful programme of mass adult literacy, teaching 150,000 people to read, and attracting the interest of international observers from as far afield as Russia. This seed of social innovation which turned education into something of a national obsession, when later fused with the political energy of nonconformist radicalism, became public innovation in the form of a locally delivered state-funded system of secondary schools.

The 1889 Welsh Intermediate Education Act saw the creation of democratically accountable Joint Education Committees – the forerunners of local education authorities – a full 13 years before England. Wales was also ahead in the creation of a publicly-funded system of school inspection and the development of a technical education curriculum to complement the grammar school model. The Welsh education system continued to innovate well into the 1940s with Holyhead County School, opened in 1949, being the first properly comprehensive school in England and Wales.

Agitation in Wales for some vestige of home rule did lead to the creation of a Welsh Department of the Board of Education (1907), the Board of Health (1919) and of the Ministry of Agriculture (1922). Though heavily circumscribed in their capacity for independent action they did allow scope for some local differentiation. A Welsh Consultative Council established under the auspices of the Ministry of Health Act of 1919 did produce a radical set of proposals for a unified system of health provision. This vision of a 'Welsh National Council of Health' was progressive even by today's standards and foreshadowed Beveridge by a quarter of a century:

*“The scheme proposed giving a pivotal role to the general practitioner and a lead role to research. It was anticipated that general practitioners would be engaged in research work at local level and would work in collaboration with staff at regional and national level. A central public health laboratory would provide specialist support to a network of small laboratories based at the regional and local health institutes. Each institute would have a library.”<sup>71</sup>*

The recommendations unfortunately fell victim to an earlier bout of austerity economics. It was the volunteers of the Tredegar Medical Aid Society – not the public sector itself – that would eventually provide the blueprint for Bevan's NHS. Similarly the story of the growth of Welsh medium education was one of local struggle in the teeth of public sector indifference from politicians and bureaucrats alike. It was often the innovation-push of public demand rather than the innovation-pull of public policy that was the principal driver of change. The first publicly-funded Welsh medium primary school was opened in Llanelli in 1947, eight years after the privately funded Ysgol Gymraeg Aberystwyth. The rest of the Welsh education system did eventually respond, over a period of decades, to parental demand, so that now over 20 per cent of Welsh secondary schools teach most of their curriculum through the medium of Welsh – the highest figure for any minority language in the world, bar Basque.



This template of community pressure turned core provision was the pipeline of public service innovation for much of the 20<sup>th</sup> century. Gradually this heroic age of grassroots action gave way to a post-war regimen in which Welsh public services were largely designed in Whitehall, with a piecemeal process of administrative devolution affording some limited scope for local variation. This was the era of the Welsh Office Circular, a command and control ethos amply symbolised by the fortress-like structure of the Government office complex in Cardiff's Cathays Park.

Welsh public innovation continued to flourish, however, in the cracks in the system. In 1967 a nurse at Ely Hospital in Cardiff sent a dossier of allegations of serious abuse to the *News of the World*. The subsequent inquiry painted a picture of insanitary conditions, ill treatment and incompetence and led to a 1971 White Paper on Better Services for the Mentally Handicapped. In response to the Ely Report locally the student action group Cardiff Universities Social Services (CUSS) began asking why people with learning disabilities should be in a hospital at all, at the time a radical idea.

Starting with a converted annex to the hospital, then in a house rented from the University, the students helped five former patients of the hospital begin living more independently. The CUSS experiment, the first group home of its kind in Europe, was a great success and led to the NIMROD project helping 150 people with learning disabilities escape the hospital model. NIMROD formed the basis for the 1983 All Wales Strategy for the Development of Services for the Mentally Handicapped which enshrined the rights of all people with learning disabilities to a normal life in the community some years before the comprehensive adoption of community-based care in England.

It is perhaps in public health that Wales, beset by chronic ill health on an industrial scale and with largely industrial roots, has had to innovate the most. The 1980s and 90s was a particular period of innovation. Heartbeat Wales, the first ever regional health promotion initiative in the UK, was launched in 1985 with massive media coverage and led to the rapid take-up of new healthy behaviours across all age groups. Breast Test Wales, the breast cancer screening charity, was founded in 1988 by Dame Deirdre Hine, who later went on to become Chief Medical Officer for Wales.

During this period the Welsh NHS saw Wales leading health policy, not just in the UK, but internationally through the pioneering concept of health gain or measurable outcomes to health policies and practices. An integrated all-Wales strategy of health improvement, the Strategic Intent and Direction (SID) was developed as a result.<sup>72</sup> It was again the Wales Effect, the spatial spin-off from our close-knit community of policy and practice that was key to this success. According to then Director of the Welsh NHS:

*“... it is the scale of the English NHS Chief Executive's task that is impossible but the same is not true of the situation in Wales which is an ideal size, not least because it is possible to get key opinion leaders into one room to secure ownership of principles and strategies, and create partnerships to enable innovation to take place right across the board, even in health and healthcare.”<sup>73</sup>*

The overriding ambition was to take the people of Wales into the 21<sup>st</sup> century with a level of health on course to compare with the best in Europe.<sup>74</sup> Using the leading countries of western Europe as a benchmark allowed Welsh policymakers to drive innovation. But the principles behind the Welsh model – the emphasis on being people-centred, on the effective use of resources and the importance of striking a balance between prevention and

treatment; care and rehabilitation; and primary and secondary care – proved influential in Eastern Europe as Wales became host to WHO Collaborating Centres in health promotion. Best practice in Wales was the basis for the 1996 WHO Ljubljana Charter on reforming healthcare which incorporated many of the key principles of Wales' Strategic Intent and Direction.

Again, path dependence was to some extent in play. Many of the SID principles echo the groundbreaking work of two of the most innovative practitioner-scientists in the history of the health service, Archie Cochrane and Julian Tudor-Hart. Cochrane's famous community study of tuberculosis in the Rhondda Fach was to form the basis of his 1972 work, *Efficiency and Effectiveness*, that has been hugely influential. A passionate evangelist for evidence-based health in general and randomised control trials in particular, Cochrane described his zeal for scientific validation as his "*Rhondda Fach worm's eye view of the working of the NHS*".<sup>75</sup>

Julian Tudor-Hart, one of Cochrane's former pupils, eschewed an academic career to become a GP in Glyncorwg in the 1960s. Exemplifying the ideal of the researcher-clinician proposed by the Welsh Consultative Council back in 1919, his most famous contribution to public health was his discovery of the inverse care law, in which areas of the greatest medical need receive the fewest resources, that has had a huge impact in Wales and further afield on work to combat health inequalities and on the emerging idea of co-production and an active participatory role for patients.

Often it was Wales' status as an 'under-stated' nation, lacking key institutions that were the source of innovative practice. The lack of a national gallery or museum of contemporary art – led to the highly popular series of mobile exhibitions commissioned by the Arts Council of Wales in the 1970s – Art & Society – examining major contemporary issues like sex, war, identity in a wide range of cultural forms including film, photography, music, fashion and advertising. This tradition of cultural improvisation, using resources to hand, could be also seen in the semi-professional roots of the Welsh National Opera and in today's English-language National Theatre of Wales turning its lack of a permanent physical home into a virtue allowing it to concentrate on theatre as performance rather than a particular type of venue or setting, or a fixed company of actors.

Another institution that was at the cutting-edge of Welsh public innovation was the Welsh Development Agency (WDA) established in 1977. Wales had for much of its history been a pioneer in government-led economic development. This in large part reflects Wales' position as an economically disadvantaged area from the 1930s on. The first ever industrial estate – forerunner of the modern business park – was built in South Wales during the Depression, with government assistance, by a Jewish businessman fleeing Nazi Germany. The New Deal era Tennessee Valley Authority was the model for the WDA which in turn inspired a new breed of regional development agencies that soon became the norm in most advanced economies

The huge environmental challenge in dealing with the unwelcome legacy of heavy industry in the former South Wales coalfield led to the development of world-class programmes of land reclamation and urban regeneration, recognised as best practice by the European Commission and the National Audit Office. This capacity for innovation extended to the more intangible aspects of economic development, with Wales in the 1990s becoming the first region in Europe to devise a Regional Technology Plan, based on 350 in-depth studies of individual technology areas, and a comprehensive entrepreneurship action plan which, for the best part of a decade, successfully raised the Welsh business birth rate.

## ENDNOTES

1. Extract of a Case Study, Life Project at Casllwchwr Primary School in Swansea.
2. These case studies were produced by the authors as part of the research for this paper. They are based on semi-structured interviews and existing evidence.
3. See Appendix 1 of this report 'Late Nation, Early Innovation' for an overview.
4. See Autumn Statement 2012 to the House of Commons by the Chancellor of the Exchequer, available at: [http://www.hm-treasury.gov.uk/as2012\\_statement.htm](http://www.hm-treasury.gov.uk/as2012_statement.htm)
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