

# Business innovation, diffusion and productivity in the West Midlands

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## Data notes and acknowledgement

All data in this report is taken from ‘Benchmarking local innovation – the innovation geography of England: 2017’, ERC Research Report, May 2017. The full report is available at: [www.enterpriseresearch.ac.uk/wp-content/uploads/2015/05/Benchmarking-Local-Innovation1.pdf](http://www.enterpriseresearch.ac.uk/wp-content/uploads/2015/05/Benchmarking-Local-Innovation1.pdf). The statistical data used here is from the Office of National Statistics (ONS) and is Crown copyright and reproduced with the permission of the controller of HMSO and Queens Printer for Scotland. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data. The analysis upon which this paper is based uses research datasets which may not exactly reproduce National Statistics aggregates

## Executive Summary

Innovation is ‘the design, invention, development and/or implementation of new or altered products, services, processes, systems, organisational structures or business models for the purpose of creating new value for customers and financial returns for the firm’.

Innovation may be new-to-the-market, radical, change in products or services or developments which are more incremental and purely new-to-the-firm. Both can be important for productivity upgrading. However, for most firms, most of the time, innovation is incremental involving improvements to existing products, services or processes rather than radical changes.

### **Where do we stand?**

In the most recent data available from the UK Innovation Survey around a third of firms across the West Midlands report undertaking (new-to-the-firm) innovation in products or services over a three-year period. Around 1:10 firms report new-to-the-market innovation, while around 1:6 firms report undertaking process innovation.

Innovation in LEP areas across the West Midlands lags that in the best performing English LEPs. Innovation gaps are generally larger for GBS and the Black Country LEP than for Coventry and Warwickshire. On average levels of innovation in Coventry and Warwickshire are 4-8 per cent below English best practice. This innovation gap rises to around 8-12 per cent in GBS and the Black Country.

### **Policy challenges and responses**

There is a growing national focus on the importance of innovation in resolving the UK Productivity challenge. The National Productivity Investment Fund aims to add £23 billion in investment from 2017/18 to 2021/22, which includes £4.7 billion for science and innovation, including a growing year-on-year profile to £2 billion per year extra in R&D, by 2021/22. The associated launch of a £115m Strength in Places fund ‘to support areas to build on their sciences and innovation strengths and develop stronger local networks’ further adds to a growing set of investment funds that the WM needs to take full advantage of as it develops its Local Industrial Strategy.

Our policy recommendations outlined below aim to help West Midlands firms take advantage of these national funding opportunities as well as building on the local advantages highlighted in the West Midlands Science and Innovation Audit (SIA)<sup>1</sup>. We also recognise that through the WMCA Innovation Board and the WM Innovation Alliance the region has the capability both to lead and implement significant initiatives which can support innovation and the development of the innovation eco-system.

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<sup>1</sup> <https://www.wmca.org.uk/media/1682/west-midlands-sia-final-for-publication-21617.pdf>.

We identify four key innovation challenges:

***1. Levels of new-to-the-firm innovation activity remain moderate by UK standards, and low in comparison to our international competitors.***

Boosting levels of new-to-the-firm innovation in both products/services and business processes can be helpful in boosting productivity. Key here is the effective diffusion of new technologies or best practice, an area in which national policy is relatively weak.

***Policy implications:***

At national level policy supports for new-to-the-firm innovation are weak as are measures to support best practice diffusion. Regional advocacy initiatives at the level of the Combined Authority may therefore be useful, and have been identified as one potential role for the WMCA Innovation Board. Lessons might be drawn from the success of public health campaigns to design local initiatives to promote best practice adoption. Successful initiatives to promote energy efficiency in firms may also provide models for more bespoke innovation support for businesses.

***2. Levels of new-to-the-market innovation remain moderate by UK standards, and low in comparison to our international competitors.***

New-to-the-market innovation is concentrated in higher productivity, larger 'Frontier' firms. These are well supported by Innovate UK and EPSRC grant awards which have a positive impact on both growth and productivity. The Industrial Strategy Challenge Fund, supporting the 2.4 per cent R&D target, should ensure adequate funding for new-to-the-market innovation over the next decade.

***Policy implications:***

Regional initiatives (at the level of the Combined Authority) could be used to support firms in developing applications for Innovate UK and EPSRC funding and for partnership development in response to national calls. Supporting Innovate UK engagement in the region may also be positive. Again this advocacy activity could be developed by the WMCA Innovation Board with delivery through the Innovation Alliance.

***3. Levels of intangible investment – in R&D and design – are moderate by UK standards and low in comparison to those in other countries.***

National support for R&D focussed on new-to-the-market innovation is set to increase sharply in future due to the IS commitments. R&D tax credits also support R&D investment. The benefits of intangible investment are not always clear.

***Policy implications:***

As above, supporting firms to take advantage of national programmes may be a useful regional initiative. Helping firms to better understand the benefits of intangible investment – e.g. in design – may also be valuable. This is something that could be taken forward by

individual LEPs drawing in partnership with the Innovation Alliance and key actors in each locality.

***4. Levels of collaboration for innovation are moderate by UK standards.***

Collaboration is a key element of innovation best practice. B2B and U2B links can both play an important role in shaping innovation, enabling new-to-the-market innovation, sharing risk and cost and improving speed to market. Such links may be promoted by stimulating networks or by directly supporting placement or knowledge transfer activity – e.g. through Knowledge Transfer Partnerships (or KTPs).

***Policy implications***

Collaborations often fail to emerge as firms are unaware of potential partners and their capabilities, find IP issues difficult and find it difficult to structure innovative collaborations. Measures such as Interface – a collective technology transfer office in Scotland or the N8 in Northern England are examples of regional supports for collaboration. Encouragement for firms to embrace KTPs or similar initiatives would also be useful in promoting new-to-the-firm innovation. This would require action at the level of the Combined Authority with the Innovation Alliance (and more broadly Midlands Innovation) potential lead bodies.

## Business innovation, diffusion and productivity in the West Midlands

### 1. Innovation and productivity – understanding the links

Innovation can be defined as the ‘the design, invention, development and/or implementation of new or altered products, services, processes, systems, organisational structures or business models for the purpose of creating new value for customers and financial returns for the firm’<sup>2</sup>. It may relate to the commercial introduction of new products, services, processes or business models and may vary from the radical to the incremental. For most firms, most of the time, innovation is incremental involving improvements to existing products, services or processes rather than radical changes.

The potential for incremental innovation suggests the link between innovation and productivity and the potential for this to benefit both leading edge and less dynamic firms. Recent OECD analysis outlines this picture stressing the role of new-to-the-market innovation in driving growth and productivity in frontier firms and – less radical - new-to-the-firm innovation in driving productivity growth in non-frontier firms (Figure 1.1). Recent research also notes the significant disparities in innovation and productivity which can exist between the most productive ‘frontier firms’ and other, more domestically-oriented, ‘non-frontier firms’, and between micro and larger companies. These disparities can be substantial. One recent study, for example, examine the relative performance of ‘global frontier firms’ across the OECD, at the forefront of innovation, and ‘non-frontier firms’ identifying a 4-5 fold difference in multi-factor productivity and a 10-fold difference in labour productivity (Table 1, p. 10)<sup>3</sup>.

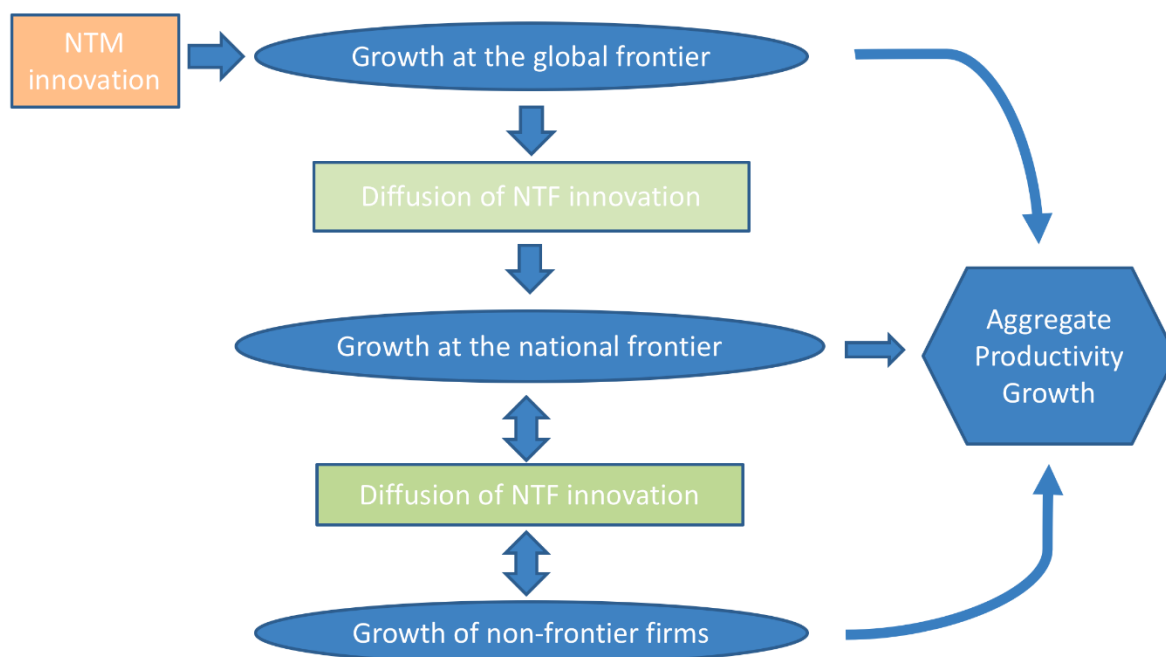
Recent analysis by the OECD also suggests that labour productivity growth in firms at the global productivity frontier has also been significantly more rapid than that non-frontier firms. This has been interpreted as suggesting that the “productivity slowdown is not so much a slowing of innovation by the world’s most globally advanced firms, but rather a slowing of the pace at which innovations spread through the economy” or a slowing of diffusion of innovations.

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<sup>2</sup> Advisory Committee on Measuring Innovation in the 21st Century Economy 2008, p. i.

<sup>3</sup> Andrews et al. (2015) identify Global Frontier firms as the 50 or 100 most productive firms globally in each sector using Orbis data. Interestingly, ‘frontier’ levels of productivity and multi-factor productivity prove volatile, however, with only around half of firms remaining at the global frontier from one year to the next. Andrews, D., Criscuolo, C., & Ga, P. (2015). Frontier firms, technology diffusion and public policy: Micro evidence from OECD countries, OECD Paris.

**Figure 1.1: New-to-the-market and new-to-the-firm innovation and productivity**



This raises a number of key questions in considering levels of innovation and diffusion in the West Midlands and existing policy supports:

- (1) How do levels of innovation (both new-to-the-market and new-to-the-firm) across the WM compare to that in other regions?
- (2) What factors support and facilitate new-to-the-firm and new-to-the-market innovation?
- (3) What can be done through local policy measures to better support productivity enhancing innovation (PEI)?

We consider each question in turn in the following sections. Note, however, that our focus throughout is on business innovation. We do not consider either public sector innovation.

## 2. Benchmarking current innovation performance

### 2.1 New-to-the-firm innovation in products and services

The ability to successfully introduce new or improved products and services is a key aspect of firms' innovation capability. Previous research studies have strongly linked new product innovation to both growth and productivity improvements. This metric measures the percentage of enterprises in each LEP introducing either a new or significantly improved product or service during the three-year period from 2012 to 2014. This is the most recent data currently available. The higher the percentage the more firms in any locality are engaging with innovation with its potential growth and productivity benefits.

Differences in the levels of this metric between local areas will reflect both the innovativeness of local firms and to some extent the structure of local industries. For example, high-tech

industries, or those where there is a high degree of competition, may have higher levels of innovative activity. Similarly, as larger firms are typically more likely to introduce new or improved products or services in any given period, those local areas where there is a preponderance of larger firms are likely to perform well on this benchmark.

On this metric the WM LEPs perform relatively well with Coventry and Warwickshire having the highest proportion of firms undertaking innovation in products and services (26 per cent). GBS LEP and the Black Country have very similar levels of innovative activity (22-23 per cent of firms) (Table 2.1). The whole WM area lags England's strongest area – the SE Midlands LEP – in which 34 per cent of firms were undertaking innovation.

**Table 2.1: The proportion of firms undertaking product or service innovation  
(% of firms)**

LEP	% firms	LEP	% firms
South East Midlands	34	York, North Yorks and East Riding	21
Northamptonshire	32	Humber	21
Cornwall and Isles of Scilly	29	North East	21
Oxfordshire	28	Sheffield City Region	21
Gtr Cambridge, Gtr Peterborough	27	The Marches	20
Coventry and Warwickshire	26	Coast to Capital	20
Gloucestershire	26	Lancashire	19
Stoke-on-Trent and Staffordshire	26	Solent	19
Cheshire and Warrington	26	Greater Manchester	19
Enterprise M3	25	South East	19
West of England	24	Worcestershire	19
Hertfordshire	24	Derby, Derbyshire, Nottingham, Notts.	18
Liverpool City Region	24	London	18
Greater Birmingham and Solihull	23	Tees Valley	18
New Anglia	23	Dorset	17
Leeds City Region	23	Greater Lincolnshire	17
Swindon and Wiltshire	23	Heart of the South West	16
Thames Valley Berkshire	23	Cumbria	16
Black Country	22	Leicester and Leicestershire	14
Buckinghamshire	22		

## 2.2 Process innovation

Alongside product and service innovation it is usual to measure firms' innovation in manufacturing or business processes. Either type of innovation may provide advantages in terms of flexibility, productivity or cost saving. Process changes have also been linked by previous research to quality improvements and firms' improved ability to develop new product and service innovations. The metric we report here is similar in nature to that for product or service change and relates to the percentage of firms in each local area introducing new or significantly improved processes during the 2012 to 2014 period.

Overall, the proportion of firms reporting that they undertook process change is lower than that for product or service innovation. Around 1:6 firms across the West Midlands LEPs report undertaking significant process change over three years (Table 2.2).

**Table 2.2: Process innovation by local economic area**  
(% of firms)

LEP	% firms	LEP	% firms
Humber	26	Buckinghamshire	16
Gloucestershire	23	York, North Yorks and East Riding	16
Greater Lincolnshire	21	<b>Black Country</b>	<b>15</b>
The Marches	21	Leeds City Region	15
Worcestershire	20	<b>Coventry and Warwickshire</b>	<b>15</b>
North East	19	Enterprise M3	14
Liverpool City Region	19	Heart of the South West	14
South East Midlands	19	Greater Manchester	14
Northamptonshire	19	Derby, Derbyshire, Nottingham, Notts.	14
Lancashire	18	<b>Greater Birmingham and Solihull</b>	<b>13</b>
Sheffield City Region	18	Gtr Cambridge and Gtr Peterborough	13
Cheshire and Warrington	18	London	12
Stoke-on-Trent and Staffordshire	17	Hertfordshire	11
Thames Valley Berkshire	17	South East	11
Tees Valley	17	Dorset	10
Solent	17	Coast to Capital	10
Oxfordshire	16	Leicester and Leicestershire	10
Cornwall and Isles of Scilly	16	West of England	9
Swindon and Wiltshire	16	Cumbria	8
New Anglia	16		



## 2.3 Innovation in business organisation and marketing

Business model innovation has attracted significant attention in recent years as firms seek new profit opportunities and new ways of creating value for customers and other stakeholders. Here we focus on three benchmarks related to organisational and marketing innovation:

- ***Firms engaged in the introduction of new business practices***– the proportion of firms reporting the adoption of new business practices during the 2012 to 2014 period.
- ***Firms engaged in the introduction of new methods of organising work responsibilities*** – the proportion of firms reporting the adoption of new work organisation methods during the 2012 to 2014 period.
- ***Firms engaged in marketing innovation*** – the proportion of firms reporting changes to marketing concepts or strategies.

Table 2.3 reports the percentage of firms in each LEP across England undertaking each type of organizational and marketing innovation. Here, we report data on LEPs alphabetically. The strongest performing LEP on these three metrics is Cheshire and Warrington. The WM LEPs lag somewhat behind this ‘best in class’ on each measure but in broad terms: around a third of firms across the West Midlands reported new business practices during the three year period; around 1:5 report new allocation of work responsibilities and 1:6 report new marketing concepts.

**Table 2.3: Percentage of firms undertaking business model innovation**

	Introduction of New Business Practices	Introduction of New Methods of Organising Work Responsibilities	Introduction of Changes to Marketing Concepts
	%	%	%
<b>Black Country</b>	<b>30</b>	<b>19.1</b>	<b>15.5</b>
Buckinghamshire	36.4	17	18
Cheshire and Warrington	38.4	27.6	26.7
Coast to Capital	30.6	21.4	20.2
Cornwall and Isles of Scilly	28	27.9	21.6
<b>Coventry and Warwickshire</b>	<b>29.9</b>	<b>23.7</b>	<b>18.5</b>
Cumbria	24.1	22.8	16
Derby, Derbyshire, Nottingham and Nottinghamshire	28.5	15.8	15.7
Dorset	28.3	17.4	16.7
Enterprise M3	18.9	18.2	19.3
Gloucestershire	24.1	22.3	17.3
<b>Greater Birmingham and Solihull</b>	<b>29.8</b>	<b>18.9</b>	<b>15.6</b>
Greater Cambridge and Greater Peterborough	30.7	26.1	21.2
Greater Lincolnshire	24.5	24.8	12.7
Greater Manchester	27.7	17.4	16.1
Heart of the South West	27.4	14.7	15.6
Hertfordshire	22.4	18.9	15.6
Humber	25	27.5	14.9
Lancashire	24.3	19.3	15.5
Leeds City Region	28.1	21.9	16.8
Leicester and Leicestershire	16.6	11.3	14
Liverpool City Region	30.4	17.8	14.9
London	25.6	22.2	17.8
New Anglia	34.2	18.1	17.2
North East	28.5	22.5	15.2
Northamptonshire	28	27.5	20.3
Oxfordshire	30.2	24.4	26.6
Solent	24.7	17.4	17.3
South East	28.4	20	18.6
South East Midlands	32.1	25.9	19.9
Stoke-on-Trent and Staffordshire	29.5	16.2	16.3
Swindon and Wiltshire	26	16.5	11.1
Tees Valley	23.3	21	19.6
Thames Valley Berkshire	27.6	26.7	20.3
The Marches	33	22.1	16.1
West of England	33.4	24.8	18.7
Worcestershire	32	16.7	18.7
York, North Yorkshire and East Riding	25.4	24.1	17.3
Sheffield City Region	30.9	22.2	16

## 2.4 New-to-the-market innovation

The previous metrics provided an indication of the extent of innovation in products, services and business processes across the whole population of firms within each locality. As noted earlier, however, innovations vary in nature, however, with a useful distinction being ‘new-

to-the-market’ or ‘new-to-the-firm’. It is generally thought that more radical ‘new-to-the-market’ innovations might generate higher returns although these are offset by the potential for higher risks. This metric provides an indication of the percentage of firms which reported introducing new-to-the-market innovations (either products or services) during the 2012 to 2014 period. As this proportion is relatively small the benchmark is unavailable for some more areas (including the Black Country LEP) due to confidentiality constraints.

To understand this benchmark it is useful first to consider the situation on one specific area. Take Oxfordshire, for example, where 28 per cent of firms reported undertaking some product or service innovation between 2012 and 2014 (Table 2.1). Over the same period 15 per cent of firms in Oxfordshire (around half of all innovating firms) reported undertaking new-to-the-market innovation (Table 2.4), the highest proportion of any local area. Areas such as Greater Manchester had both lower levels of overall innovation (19 per cent of firms, Table 2.1) and new-to-the-market innovation (8 per cent, Table 2.4). More generally, five of the ten best performing local areas in terms of new-to-the-market innovation, were also in the ten best performing areas in terms of their overall innovation performance.

Among areas in the West Midlands we see a rather different picture to that for new-to-the-firm innovation. In GBS LEP area 23 per cent of firms introduced new-to-the-firm innovations of which around 7 per cent (roughly a third) also introduced new-to-the-market innovation (Table 2.4). In C&W LEP the level of new-to-the-market innovation was slightly higher at 11 per cent (Table 2.4) compared to 26 per cent of new-to-the-firm innovators.

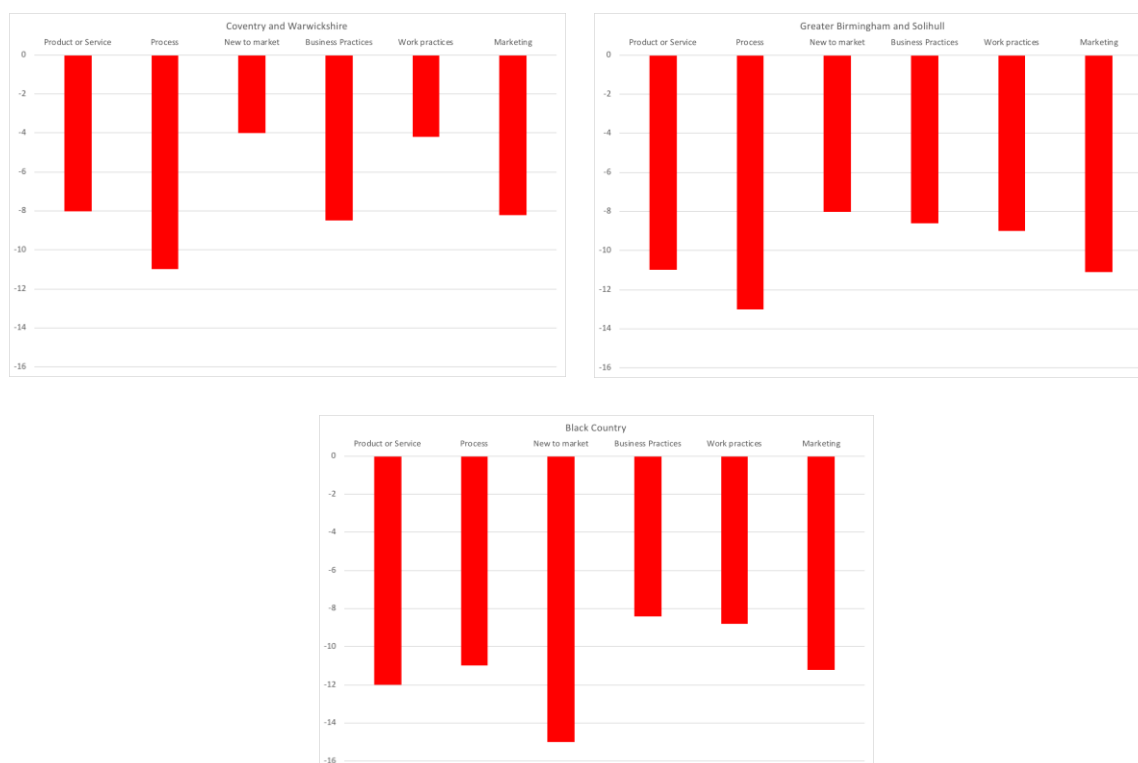
**Table 2.4: New-to-the-market product and service innovation by Local Area**  
(% firms)

LEP	% firms	LEP	% firms
	%		
Oxfordshire	15	New Anglia	8
The Marches	14	South East	8
South East Midlands	13	Buckinghamshire	8
Northamptonshire	13	London	8
Hertfordshire	13	Lancashire	7
Thames Valley Berkshire	11	Cheshire and Warrington	7
Coast to Capital	11	Gloucestershire	7
Gtr Cambridge, Gtr Peterborough	11	Leeds City Region	7
Coventry and Warwickshire	11	Swindon and Wiltshire	7
Enterprise M3	10	Sheffield City Region	7
Stoke-on-Trent and Staffordshire	10	Greater Birmingham and Solihull	7
West of England	10	North East	7
Solent	9	Leicester and Leicestershire	6
Greater Manchester	8	Derby, Derbyshire, Nottingham, Notts.	5

## 2.5 Our innovation 'gaps'

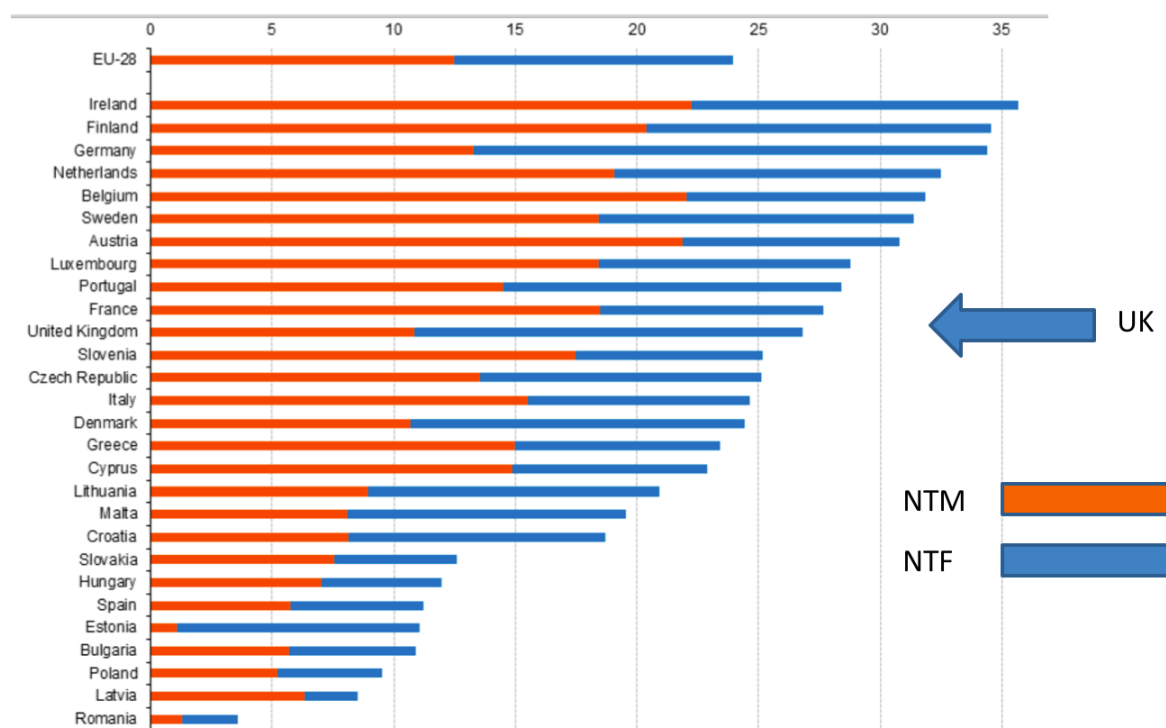
In this section we provide a summary of the gaps in innovation performance between LEPs in the West Midlands and the best performing English LEPs on each of the metrics outlined earlier. Figure 2.5 presents the data in terms of percentage of firms. The interpretation is as follows: Coventry and Warwickshire LEP would need to increase the proportion of firms doing product or service innovation by around 8 per cent to match the best performing English LEP. Innovation gaps are generally larger for GBS and the Black Country LEP than for Coventry and Warwickshire. On average levels of innovation in Coventry and Warwickshire are 4-8 per cent below English best practice. This innovation gap rises to around 8-12 per cent in GBS and the Black Country (Figure 2.1).

**Figure 2.1: Innovation gaps to best performing English LEP  
(% of firms)**



These benchmarks compare the levels of innovative activity in the West Midlands LEPs to those in other areas of England. In international terms, however, the UK itself performs relatively poorly compared to a number of other European economies. Figure 2.2 benchmarks new to market and new-to-the-firm innovation in the UK relative to other EU countries.

**Figure 2.2: UK innovation performance relative to other EU countries: 2012-14**



Source: [http://ec.europa.eu/eurostat/statistics-explained/index.php/Innovation\\_statistics](http://ec.europa.eu/eurostat/statistics-explained/index.php/Innovation_statistics)

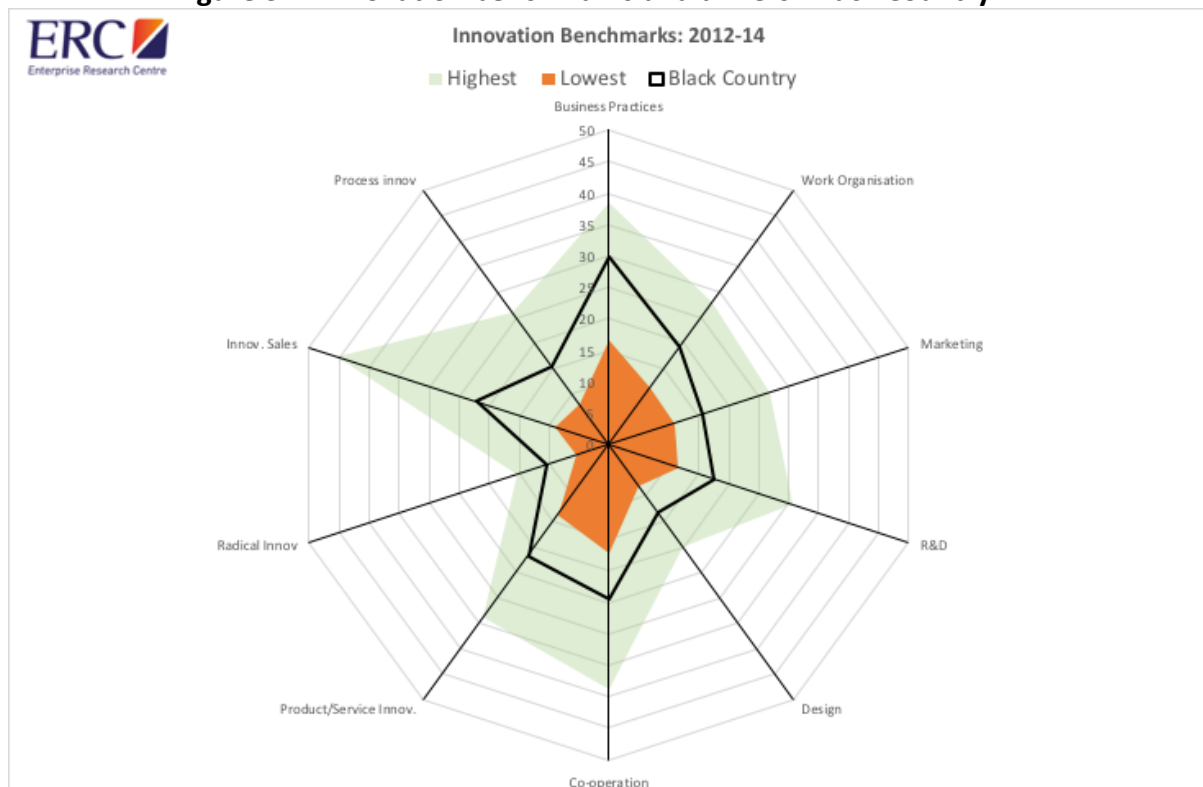
### 3. Innovation and its drivers – LEP by LEP

Recent thinking about the drivers of innovation has adopted an eco-system perspective, recognising that the process of innovating is complex, collaborative and requires the active engagement of different skill groups within the region. This eco-system perspective underlies recent reports on innovation in the West Midlands such as the Science and Innovation Audit. Here, we focus briefly on where each LEP area stands in terms of some of the key eco-system elements: R&D, design and collaboration and partnering.

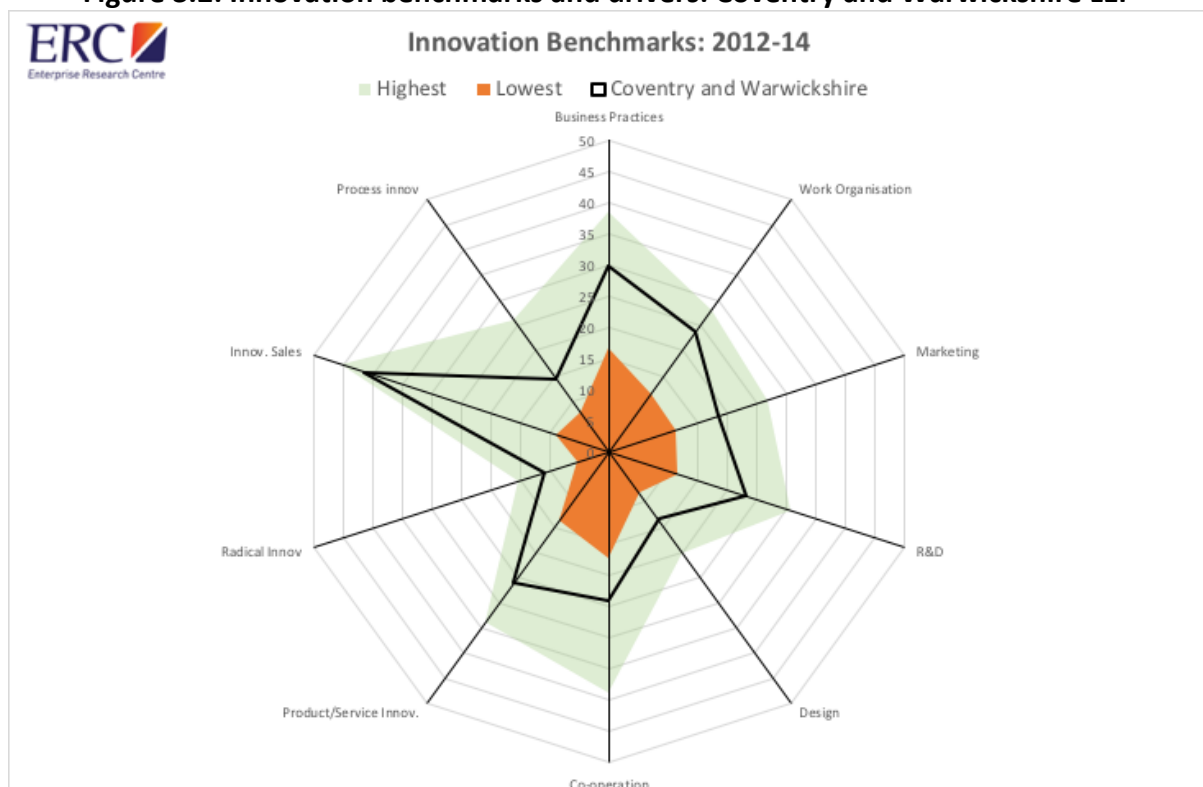
Radar charts for each LEP in the WMCA are included below reflecting the metrics discussed earlier and firms' engagement with R&D, design and collaboration and partnering. All but one of the metrics are measured in terms of the proportion of firms engaging with each activity. The innovative sales metric is measured as the average percentage of sales derived by firms from newly introduced products or services. In each case the green shape represents the best performing LEP, the orange shape the lowest performing LEP

Firms in the Black Country LEP have levels of R&D, design investment and collaboration for innovation in the middle of the UK distribution of LEPs with no obvious points of strength or areas of weakness (Figure 3.1). Firms in Coventry and Warwickshire perform most strongly on the innovative sales metric, suggesting strong capabilities in terms of the commercialisation of innovation. Levels of engagement with R&D, design and collaboration are in the middle of the UK distribution.

**Figure 3.1: Innovation benchmarks and drivers: Black Country LEP**

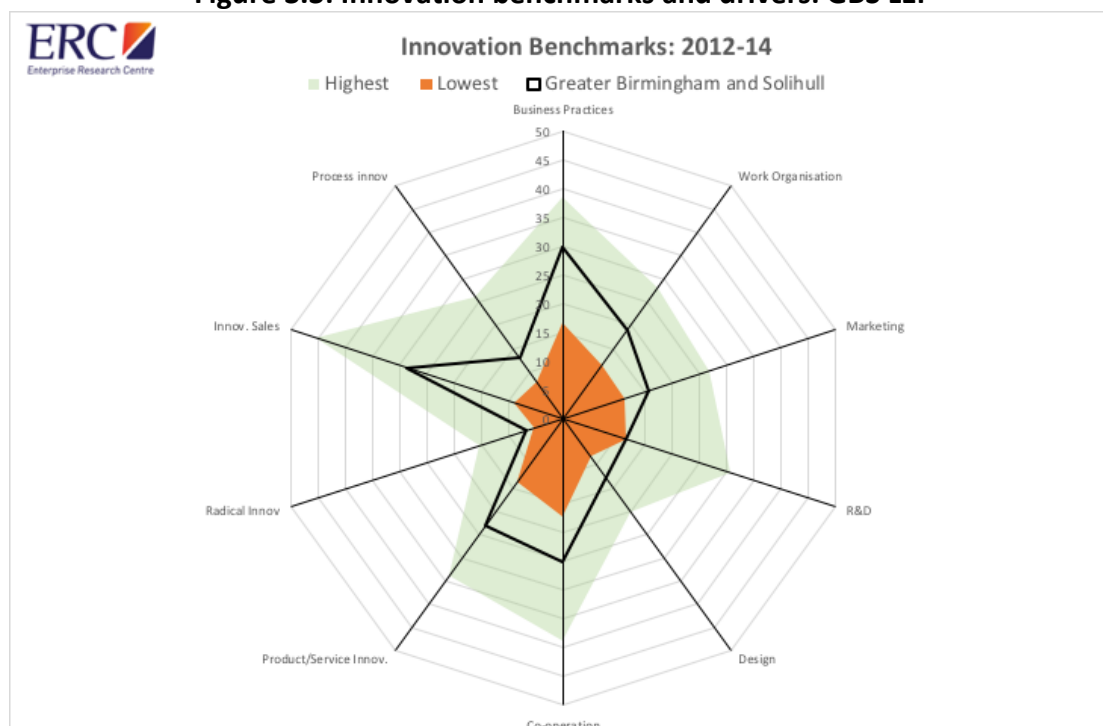


**Figure 3.2: Innovation benchmarks and drivers: Coventry and Warwickshire LEP**



Perhaps the most notable feature of the radar chart for GBS LEP is the relatively low level of engagement by firms with R&D, something which may be linked to the relatively low levels of new-to-the-market innovation noted earlier (see also Figure 3.3).

**Figure 3.3: Innovation benchmarks and drivers: GBS LEP**



#### 4. Policy challenges and responses

There is a growing national focus on the importance of innovation in resolving the UK Productivity challenge. The National Productivity Investment Fund aims to add £23 billion in investment from 2017/18 to 2021/22, which includes £4.7 billion for science and innovation, including a growing year-on-year profile to £2 billion per year extra in R&D, by 2021/22.

In the national Industrial Strategy there is a strong connection between Innovation and Place with an emphasis on the importance of building innovation excellence ‘across the country’. The associated launch of a £115m Strength in Places fund ‘to support areas to build on their sciences and innovation strengths and develop stronger local networks’ further adds to a growing set of investment funds that the WM needs to take full advantage of as it develops its Local Industrial Strategy. Our policy recommendations outlined below aim to help West Midlands firms take advantage of these national funding opportunities as well as building on the local advantages highlighted in the West Midlands Science and Innovation Audit (SIA)<sup>4</sup>. The SIA identifies areas of science and innovation expertise across the WMCA geography in its research base, innovative companies and other bodies in the wider innovation ecosystem. The SIA states:

<sup>4</sup> <https://www.wmca.org.uk/media/1682/west-midlands-sia-final-for-publication-21617.pdf>.

‘The research landscape across our area is multi-faceted, spanning the full ‘Technology Readiness Level’ spectrum, from basic and experimental research, through to applied and collaborative R&D, and on to commercial implementation. Our area includes eight universities with particular strengths in the broad areas of engineering, physical science and the biosciences.’

In endorsing the WM SIA, the 3 LEP Chairs and the Mayor concluded that it

‘shows that, with the right leadership, cooperation and targeted action, the West Midlands has the science and innovation strengths, assets and relationships to seize this moment to further develop and exploit our science and innovation capabilities to maximise growth across our economy.’

Through the developing WMCA Innovation Board and the WM Innovation Alliance the region has the capability both to lead and implement significant initiatives which can support innovation and the development of the innovation eco-system. The innovation challenges and policy implications developed below aim to enable the region to ‘seize this moment’ and promote increased innovation and productivity across the region.

We need to recognise, however, that we start from a relatively modest base. Levels of business innovation across the UK, and across the West Midlands, are low by international standards. At most one third of firms report being engaged in innovation – as measured by the UK Innovation Survey – with smaller firms less likely to be innovating than larger companies. We identify four key innovation challenges. These echo the findings of the West Midlands Science and Innovation Audit and the earlier responses to the call for evidence by the WM Productivity and Skills Commission<sup>5</sup>:

***1. Levels of new-to-the-firm innovation activity remain moderate by UK standards, and low in comparison to our international competitors.***

Boosting levels of new-to-the-firm innovation in both products/services and business processes can be helpful in boosting productivity. Adoption of Computer Aided Manufacturing or Automated Materials Handling are, for example, associated with average productivity gains of around 7k pa per employee. Key here is the effective diffusion of new technologies or best practice, an area in which national policy is relatively weak.

***Policy implications:***

At national level policy supports for new-to-the-firm innovation are weak as are measures to support best practice diffusion. Regional advocacy initiatives at the level of the Combined Authority may therefore be useful, and have been identified as one potential role for the WMCA Innovation Board. Lessons might be drawn from the success of public health campaigns to design local initiatives to promote best practice

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<sup>5</sup> See <https://www.wmca.org.uk/what-we-do/productivity-skills/next-steps/>.



adoption. Successful initiatives to promote energy efficiency in firms may also provide models for more bespoke innovation support for businesses.

***2. Levels of new-to-the-market innovation remain moderate by UK standards, and low in comparison to our international competitors.***

New-to-the-market innovation is concentrated in higher productivity, larger ‘Frontier’ firms. These are well supported by Innovate UK and EPSRC grant awards which have a positive impact on both growth and productivity. The Industrial Strategy Challenge Fund, supporting the 2.4 per cent R&D target, should ensure adequate funding for NEW-TO-THE-MARKET innovation over the next decade.

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Regional initiatives (at the level of the Combined Authority) could be used to support firms in developing applications for Innovate UK and EPSRC funding and for partnership development in response to national calls. Supporting Innovate UK engagement in the region may also be positive. Again this advocacy activity could be developed by the WMCA Innovation Board with delivery through the Innovation Alliance.

***3. Levels of intangible investment – in R&D and design – are moderate by UK standards and low in comparison to those in other countries.***

National support for R&D focussed on NEW-TO-THE-MARKET innovation is set to increase sharply in future due to the IS commitments. R&D tax credits also support R&D investment. The benefits of intangible investment are not always clear.

***Policy implications:***

As above, supporting firms to take advantage of national programmes may be a useful regional initiative. Helping firms to better understand the benefits of intangible investment – e.g. in design – may also be valuable. This is something that could be taken forward by individual LEPs drawing in partnership with the Innovation Alliance and key actors in each locality.

***4. Levels of collaboration for innovation are moderate by UK standards.***

Collaboration is a key element of innovation best practice. B2B and U2B links can both play an important role in shaping innovation, enabling NEW-TO-THE-MARKET innovation, sharing risk and cost and improving speed to market. Such links may be promoted by stimulating networks or by directly supporting placement or knowledge transfer activity – e.g. through Knowledge Transfer Partnerships (or KTPs).

***Policy implications***

Collaborations often fail to emerge as firms are unaware of potential partners and their capabilities, find IP issues difficult and find it difficult to structure innovative collaborations. Measures such as Interface – a collective technology transfer office in

Scotland or the N8 in Northern England are examples of regional supports for collaboration. Encouragement for firms to embrace KTPs or similar initiatives would also be useful in promoting new-to-the-firm innovation. This would require action at the level of the Combined Authority with the Innovation Alliance (and more broadly Midlands Innovation) potential lead bodies.

## References