

# Skills Anticipation in England: The creation of a demand led system

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Presentation to the ILO-UK Skills for Prosperity in South-East Asia  
Programme (SfP-SEA) Webinar:

Making South-East Asia skills and TVET systems future-ready: The role of  
skills anticipation systems in matching future skills needs in the labour  
market

25<sup>th</sup> May 2021

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# Creating a demand led system

- Two long-standing problems:
  - how to increase the demand for skills; and
  - ensure skills supply is responsive to demand
- 1980s/1990s strong emphasis on stimulating demand for skills (e.g. creation of programmes such as Apprenticeships)
- Then more emphasis on creating a genuinely demand-led system (cf. Leitch Review 2006)

# The core of the system

- Identifying areas where government needs to intervene
  - e.g. funding of certain courses
- Provision of information so that people can make informed choices about which courses / qualifications / training to invest in
  - A substantial resource has been expended on creating a large volume of information on skill demand
- Linking funding of training providers to their capacity to meet labour market demand
  - e.g. via employer routed funding – employers will tend to invest in things which have a positive return
- Engaging employers in the design of vocational courses

# Labour Market Information

- Capacity building – a range of organisations involved in supplying labour market information and analysis
- In general, there are wide variety of information which provide information on:
  - Employment trends, including projections of future employment demand by occupation and sector (Working Futures)
  - Ad hoc sectoral studies
  - Evidence on the rate of return to various qualifications
  - Surveys of employers to ascertain the level of skill mismatches (Employers Skills Survey)
    - Skill shortage vacancies - number of hard to fill because of a shortage of applicants with the skills, experience or qualifications required
    - Internal skill gaps (extent to which existing staff are proficient at job)
- Information is available through various sources. The Labour Market Information for All ([LMI for All](#)) portal is a one-stop shop
  - It provides a range of information which can then be used by various intermediaries to communicate with the groups they serve
- Increasing use of data science techniques, especially of vacancies
- Use of more qualitative future oriented analyses - foresight

# LMI for All (Imiforall.org.uk)

The LMI for All portal provides high quality, reliable labour market information (LMI) to inform careers decisions.



## [Explore LMI data – interested in the labour market and want labour market information?](#)

Here you can find out where to access information on the labour market and link through to some websites using LMI for All data. You can also explore data using our widgets, Careerometer and Skillsometer.

## [Designers – want to design your own labour market information website or application?](#)

Here you can get some inspiration on how LMI for All could be used in your own website and learn how others have done it.

## [Developers – want to use LMI for All?](#)

If you are a developer and want to use the LMI for All service, then you can find out about the service, how to access the API and, importantly, find out about the structure of the database and the data it includes.

# From occupation to skills

- Typically occupation and qualification level have been used as proxy measures of skill
- Increasingly the skills requirement approach has come to the fore
  - i.e. looking at the specific skills individuals need to do their job – typically looking at level of skill, the importance to the job, and the frequency of use.
- Various surveys have used this approach – notably the Skills and Employment Survey (periodically conducted between 1986 and 2017)
- Increasingly data science techniques are being used to capture these type of data through data scraping from websites
  - These are still in development
  - There remain concerns about the representativeness of the data and their ability to capture information about mismatches
  - But seen as increasingly important means of capturing data on skill demand

# Data scraping example

[England vacancies](#)[Map wages by counties](#)[Wages by sectors, occupations and counties](#)[Job titles by occupational groups](#)[Skills demanded](#)[Evolution of the number of vacancies](#)

Occupation:

Actuaries, economists and statisticians ▼

Search

This section presents the skills most frequently demanded in England. Where 1 indicates the skill most demanded, 2 the second skill most required and so on.

## Skills:

1).Apply statistical analysis techniques 2).Below-the-line technique 3).Business model 4).Business requirements techniques 5).Communication 6).Design process 7).Develop personal skills 8).Identify service requirements 9).Identify talent 10).Lead a team 11).Manage quality 12).Manage staff 13).Perform business analysis 14).Perform data analysis 15).Perform live 16).Present evidence 17).Provide leadership 18).Report well results

## Mean Wage

42,334 GBP

# Future oriented studies

Quantitative projections of future occupational skill demand – [Working Futures](#) - produced since 1980s

Levels (000s)	thousands				
	2017	2027	Net Change	2017-2027 Replacement demand	Total requirement
Managers, directors and senior officials	3,566	4,005	439	1,380	1,819
Professional occupations	6,873	7,695	821	2,362	3,183
Associate professional and technical	4,884	5,310	425	1,599	2,024
Administrative and secretarial	3,681	3,077	-604	1,152	549
Skilled trades occupations	3,433	3,126	-307	929	623
Caring, leisure and other service	3,345	3,811	466	1,335	1,801
Sales and customer service	2,929	2,877	-52	907	855
Process, plant and machine operatives	2,180	1,974	-206	657	452
Elementary occupations	3,956	3,947	-9	1,258	1,249
All occupations	34,848	35,821	973	11,581	12,554

## Foresight / horizon scanning type approaches

- Prominent role of expert opinion...
- ... linked to examination of past trends and identification of potential disruptive events
- Key role of expert panels / opinion
- Sometimes concerned with shaping as well as predicting the future
- Skills foresight has been undertaken through the Government Office of Science – [Future of Skills and Lifelong Learning](#) (2018)



# Conclusions

- **Skills anticipation in England**
  - Plurality of approaches
  - Now much more emphasis on understanding demand for specific skills rather than occupations
  - Provision of 'raw' information which can be translated so that it is meaningful to different labour market actors
  - Assumes that people will act upon the information provided
- **Implications resulting from demand led systems**
  - Assumes supply side can quickly respond to change
  - Perhaps focus on current rather than future demand (notwithstanding the futures element)

# For more information

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