

Collaboration in model use through the development of an online collaborative portal

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Collaboration in model use through the development of an online collaborative portal

A partnership between WSP, Brunel University & Isee Systems to enhance the collaborative potential of models

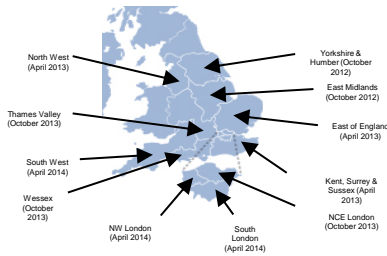


Fig 1 Regional members of the Workforce Modelling Collaborative

Context:

- The UK Health System & making strategic decisions about medical training numbers at a regional level
- A group model building process that resulted in a generic framework for addressing their key challenges
- A Workforce Modelling Collaborative in which members 'signed up' to calibrating models and sharing these in a 'safe' environment

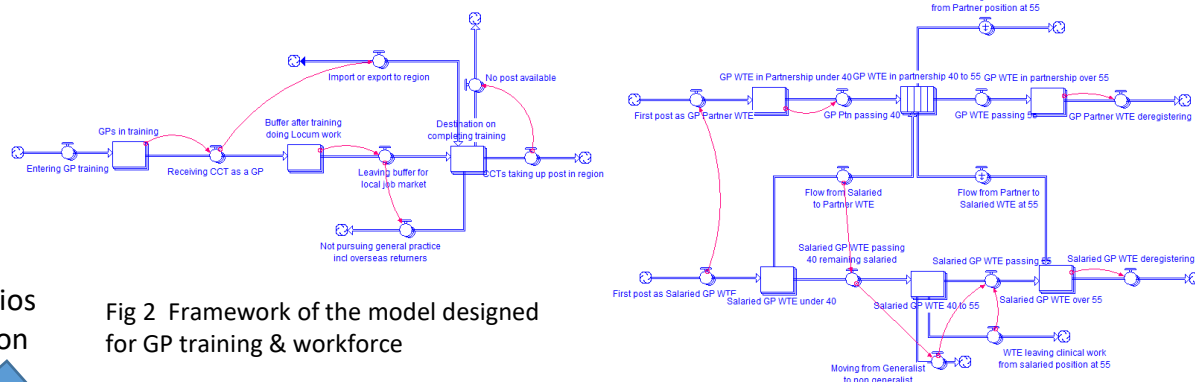


Fig 2 Framework of the model designed for GP training & workforce

The practical challenge:

- Once calibrated it would have been a time consuming exercise to collate and compare the outputs
- There was little opportunity to compare 'what if' scenarios
- The available technology for web deployment focussed on the use of single models or 'gaming'

The vision: *an online collaborative environment in which a generic model, calibrated to several different locations, could be shared for the purposes of comparison and benchmarking.*

The technical challenges:

- Extraction and storage of data from online simulation runs
- The creation of a robust online depository of simulation runs from which scenarios can be chosen for comparison
- The development of an intuitive and accessible benchmarking and comparison environment

The project: a two-year part government/part WSP funded 'Knowledge Transfer Partnership' between WSP, working closely with Isee Systems, and Brunel University over which time the KTP Associate sought to address the challenges and bring to market a business solution fit for purpose



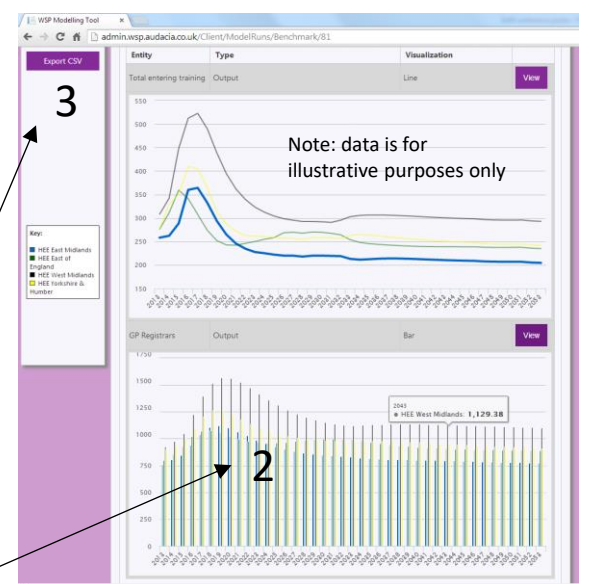
The vision realised

Fig 3 An embedded itthink model retrieved from the online calibrated set of models with a scenario run by the client.

Fig 4 A comparative set of outcomes for a different client using the saved simulations from other locations.

Note functionality:

1. The ability to save individual simulation runs and then select from a full menu
2. Ability to download full dataset for comparative simulation runs
3. Selection of locations to be compared is in the hands of the end user



The benefits:

- Consolidating the position of system dynamics models at the heart of a continuous improvement cycle addressing a real business need
- Strengthening the contribution of system dynamics models to the art and science of encouraging the spread and adoption of good practice
- The ability of this approach to drive up the quality and consistency of data that is required to feed system dynamics models
- The power of the approach to take account of local variation and different starting points in coming to aggregate strategic decisions thus complementing 'top down' with 'bottom up' approaches

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