

Visualising Creative Work.

An Interactive Virtual Reality Mapping of the North Sea Region's Content Creation Industries.

Interreg



North Sea Region
Create Converge

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The project will produce a working prototype of an interactive map of creative businesses in Denmark. Participants will wear a Virtual Reality headset and be prompted to select a visualisation mode. Data will then be fetched from our database using the selected mode. For instance, the participant will be able to navigate their way round a virtual city with the buildings representing the data sets of that country: building height represents annual turnover of an individual company, architectural style represents the type of creative outputs i.e. films, animation or web design

Partners:

Arhaus University, Denmark,
Via University Arhaus, Denmark,
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with density of buildings representing clustering of creative companies. Other modes which can be selected to visualise the data include a world globe, a jungle, stacks of film cans / DVDs the interior of a human brain. The Danish prototype research will then be extended to incorporate other European countries in the region including Germany, Finland, UK, Netherlands, Sweden. Data is currently being gathered for the UK followed by Netherlands and Sweden with Finland and Germany following in 2018.

Development of policy and specific measures relevant to digital industries that are drivers of growth and employment is a key driver for the UK Government. The creative industries have a traditional power base in urban areas and particularly in London (Hope Livingstone Report). NESTA's report "The Geography

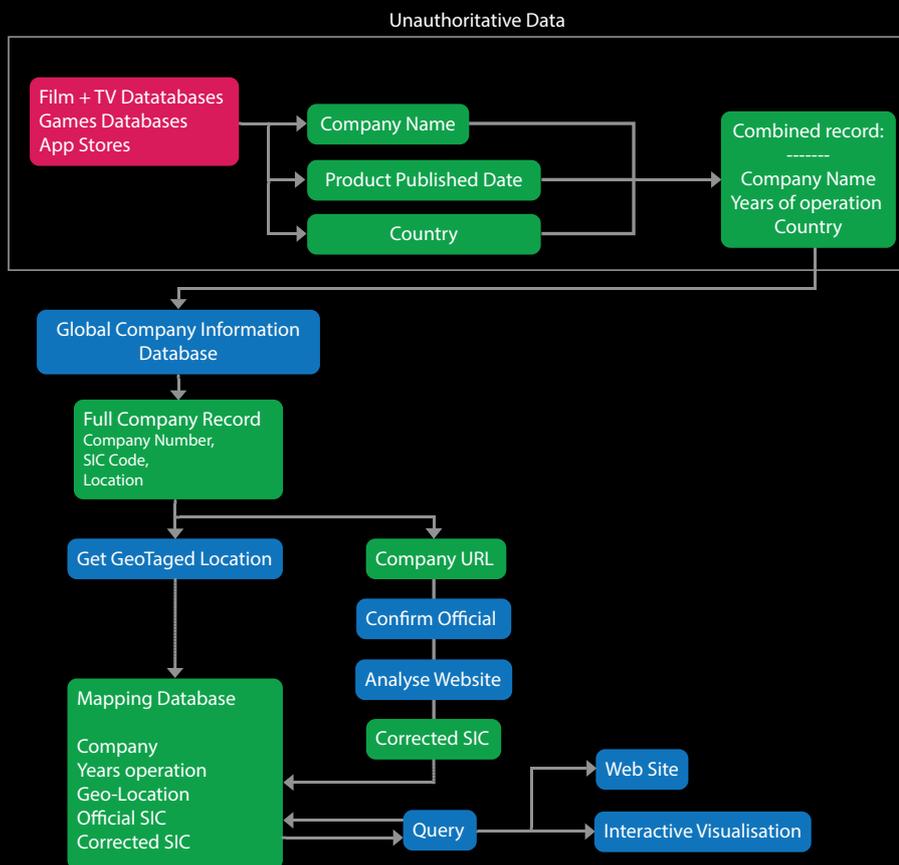
Of Creativity In The UK" (July 2016) offers a mapping of the UK's creative Industries based on Office of National Statistics data. It is essential a 'Big Data mapping exercise'.

Reference is made to Europe 2020 and associated Flagship Initiatives - Smart growth/Digital agenda for Europe; Sustainable growth/An industrial policy for the globalisation era; Inclusive growth/An agenda for new skills and jobs.

Reference is also made to the Creative Europe strategy and the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the committee of the Regions (Brussels, 26.9.2012 COM(2012) 537 final) on Promoting cultural and creative sectors for growth and jobs in the EU.



Image Credit: *Anthems Electronic 80's 2*, Ministry of Sound (2010)



The UK Film Distributors Association says “There is an unquenchable public demand for compelling stories” and that “Distribution is the king-maker – the lynchpin of the film value chain”. The same is true, in essence of all entertainment and educational media and content. Taking a UK example, more than half of all British films produced are not released in cinemas and across the EU, many regional stories do not cross over to other regions. It is a fallacy to label this as a distribution problem.

The main difficulty in building a database of companies is building the initial list as there is no definitive list available, although initially sourcing a list of known contacts from partners it became quickly apparent that

this was not representative of the entire industry. To circumvent this, issue a big data approach has been taken in the collection of the source data. Extending the approach taken in A Map of the UK Games Industry NESTA (2014) we collected data about the products the company created rather than looking for the companies directly enabling detection of companies regardless of media footprint. The data is collected from a variety of internet sources including IMDB, Moby Games and other Internet databases. This untrusted data is then verified against public gov. records where possible verifying company name, length of time the company has been in existence, Sector Industry Code and location information.

Once verified, this data is injected into our trusted database which holds the company official record alongside the provenance data of its collection. We then geo-code each address using the companies registered address. Further enriching the data by attempting to link company names with their respective websites to enable a Natural language analysis to take place to confirm the SIC code registered with what is their key products and activities. Once the data has been collected, verified, enriched the record is marked as complete and handed over to our record management system that periodically updates the records to maintain relevance.

Our VR data visualizer queries the completed database to enable visualisation of various dimensions of the data, rather than displaying the data in a raw form the user will see the data through the lens of a machine learning algorithm which will provide data insights including animated maps of industry, graduate dispersal from educational institutions, movement trends of the industry. To enable accessibility to the final solution it will be available for both VR and screen space platforms through WebVR.

Impact to other sectors is the projects success measure. The map will also offer lessons on innovative approaches & best practice for other sectors ranging from games to medical imaging & beyond to companies that are increasingly under pressure to produce sophisticated AV content for marketing, training & other purposes. The workflow & methodologies will aim to show companies that pooling resources & ICT infrastructure will open new markets.