## **SPE Norway—Digital Environments**

## **Unlocking the value from the 50 years' old Exploration Data**

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The Unstructured Data Challenge was launched last year with the aim of proving that modern data and information sciences could extract half a century old unstructured data which could be used to create context and clarity by combining it with the structured data.

and gas industry), launched access to their bore logs to utilise drilling data. unstructured data in the summer of 2016. CDA wanted to work with a small number of It was found that the data in the Common knowledge in CDA's vast data repositories to way as on the Norwegian Continental Shelf. help the search for hydrocarbons. AGR Soft- Being able to complete the data set for both ware team welcomed the challenge along with the British and the Norwegian side is of great eight other contractors.

As part of the CDA challenge, AGR's Soft- less relevant wells in the same sector rather ware team were given more than 50 years' than the ones across the border because the worth of data, or as a comparison, 3.5 Tera- data is not readily available. bytes of files, logs and images in a plethora of formats and quality.

AGR carried out the project using its own tremendous benefit in finding trends, making iQx<sup>TM</sup> data management software to tackle the predictions about the area, equipment, time CDA data, looking specifically at final well and cost. When anomalies in the data are reports, many of which were handwritten with found, the planning team often spends a lot of no consistent structure.

AGR Software's main focus has always been or whether they represent a risk for the proto make available data accessible; so the de- ject

CDA (Common Data Access), the subsidiary velopers started out defining the structured of Oil and Gas UK (established to facilitate data, finding formation tops and surveys for the sharing of well and seismic data by the oil more than 5,500 wellbores, and parsing well-

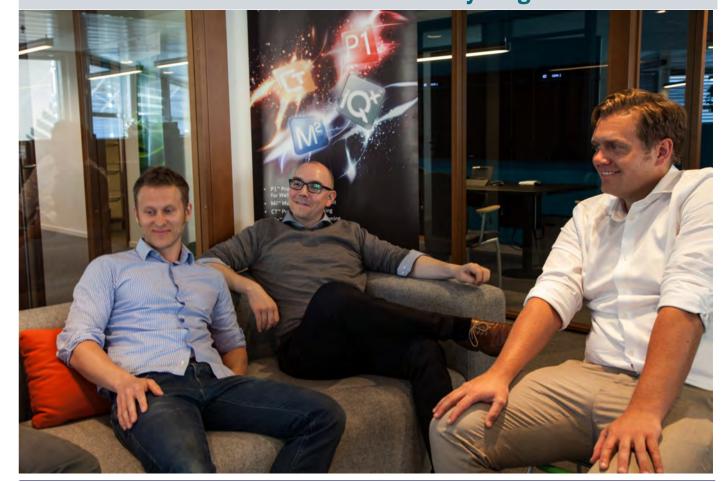
vendors to see how they could unlock the Data Access was structured in much the same importance, since geology is the same despite national borders. Too often we see people use

> When planning wells, we find that structured and historic data about similar wells is of time going through verbose final well reports to find if the anomalies arise due to data errors



Source: AGR

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AGR Software developers

That is why we wanted to contextualise the in a new way. We were also fortunate enough data by presenting the relevant information in to present our ideas and findings not only for the application itself. The team at AGR Soft- CDA, but all the other companies that partici-Lucene to index and make the data searchable. sight not only into the value of their data, but They then began looking for the relevant also novel ways to apply this knowledge. headers to be able to extract the relevant data such as operational summaries, experiences The results of the work underdone and find-

Page 41

CDA did not only want us to create a solution, <u>subsurface-data/</u>). but gave us an opportunity to define what we wanted to explore, enabling us to think of data

ware started out looking at the final well re- pated in the challenge. This community had ports using OCR to make them machine- approached the challenge in different and readable, then used open-source tools like interesting ways, which gave CDA great in-

and risks. Although some of the data was ings were presented during a workshop hosted saved as scanned pdf, the team were able to in Aberdeen in late November. A short sumextract value from quite a number of files. mary of all presentations delivered at the When combined with the structured data, it is workshop held after the Challenge can be read much easier to understand the context of the here (http://cdal.com/index.php/2016/12/19/ proceedings-now-available-cda-ecim-jointworkshop-on-digital-dividends-from-









