HALL HUNTER CALLS ON WHERESCAPE TO DELIVER **QUICK, ACCURATE INSIGHT** FROM **COMPLEX DATA PROCESSING**

Hall Hunter Partnership (HHP) is a leading UK fruit grower, with locations in Berkshire, Surrey and West Sussex. A family run business, HHP was founded in 1966, and now counts Waitrose, Marks & Spencer and Tesco among its largest customers. During the harvest season, HHP employs over 2,000 workers spread across seven production sites, four traditional farms and three glasshouse sites.

HALL HUNTER Partnership

"With WhereScape, you are emboldened to experiment and process data in ways in which you would previously have thought impossible. Now we dare!"

- Single source of truth created, despite surge in volume and complexity of data
- Reporting time reduced in some instances cut to just seconds
- Automated approach scales up productivity of one employee to the equivalent of four

The challenge:

In order to remain efficient and competitive, HHP is constantly analysing data from a variety of sources: productivity of the pickers when harvesting, the costs of picking fruit at different times, sensor data collected from the fields and data from operational systems (including Packstar for the packing operation and Harvest Manager for the farming operation).

The challenge HHP faced was how to derive insightful truths from these disparate data sources. Useful data was often found fragmented or isolated with records being registered in different source systems and spreadsheets. An ever-increasing excess of complex formulas and charts expanding the size of workbooks was a challenge, and having to maintain multiple saved instances to sustain a reporting timeline resulted in a slow turnaround when analysing vast quantities of data.

"We have been delighted with the results WhereScape has achieved for us so far! Now that we are reporting from one central data warehouse, we are able to capture and store critical information whatever the data source and, as a result, provide more accurate and consistent reports across multiple business areas."



Solution:

In order to achieve the 'single source of truth' that would provide accurate information on the health of the business; Hall Hunter Partnership decided to review its infrastructural stance on data management and build a data warehouse using WhereScape Data Warehouse automation.

Alex Gooi business analyst at HHP, explains: "We knew that reviewing a more efficient and accurate way to collate and analyse this data would enable the team to make better, data driven decisions, eliminate guesswork and allow us to identify and act quickly upon trends."

"What we needed," continued Gooi, "was an independent, centralised repository into which we could channel all informational flows to build our bigger picture."

This repository would be able to capture and store critical information from any one of the various data sources and, crucially, retain this information for several years or more. HHP's previous situation made analysis across multiple years virtually impossible and, with the planned ingress of data coming from field sensors, the existing situation was only going to become even more stressed. "We are in the process of installing more sensors in our fields and glasshouses," explained Gooi. "These sensors will record information such as pH levels in the soil, temperatures and humidity. Previously, we could only store 30 days of sensor readings but, in order to build up an accurate picture of historical comparisons and trends, we needed a solution that could retain the new sensor data for several years or more."

WhereScape:

Gooi had previous experience of working with WhereScape's 3D and RED solutions, and so invited WhereScape to come in and discuss a solution to HHP's challenge.

WhereScape was able to provide the necessary infrastructure to rapidly build a data warehouse through the automation of the SQL code and scripts required. The benefits of such automation mean that the quality and consistency of scripting is standardised, representing a solution that is well structured, adopts best practice and, from a corporate governance perspective, is well documented.

In addition, WhereScape's automated solution provided HHP with the ability to build rapidly, which was of significant importance to the firm, given the size of the IT team versus the productivity required. In effect, the output of one person has now scaled up to the equivalent of four.

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Benefits of the solution:

Already, within just a few months of rolling out the WhereScape solution, Hall Hunter Partnership has reaped several benefits of data warehouse automation.

Single Source of Truth

With a surge in volume and complexity of data, perhaps the biggest challenge that HHP was looking to address was creating a single source of the truth. WhereScape has enabled the firm to support and strengthen data consistency and increase developer productivity by storing information only once. Now, through the high level transparency that WhereScape provides on any data flows and transformations, adjustments only have to take place once.

Support mobile infrastructure

As most of HHP's activities represent working out on field, the IT growth areas and investments over the next few years will very much be planned around adopting better mobile infrastructure. "This has also meant rethinking how we deliver information in these new formats," commented Gooi.

Through WhereScape, Hall Hunter is able to condense large transactional tables into summaries representing a significant smaller footprint that better supports use of mobile infrastructure. WhereScape supports the storing of transformed, insightful summaries in the form of calibrated schemas. Using such schemas see a dramatic reduction in turnaround response times on preexisting reports, so reports that used to take 20 minutes to refresh now take a couple of seconds.



Like-for-like data analysis

One of HHP's long-term objectives was the ability to compare identical varieties of fruit grown on similar crop systems between HHP farms to see how productivity, quality of fruit and yields compare. Until now, this has been almost impossible to deliver upon because of the challenges of carrying out a fair comparison due to micro-climate, geological differences, differing sizes of field and differing crop plan schedules to supply a sustainable volume of fruit throughout the year. WhereScape, however, has demonstrated the capability of summarising complex data arrangements.

Gooi explained: "with WhereScape it is now easy to align fields within a common timeline reference without altering how data is originally recorded or stored."

For volume comparison, yields were stored as a combination of running totals and milestones reached expressed as a percentage. This has given HHP stakeholders a high level summary of what is possible to achieve on field, as well as being able to focus on examples where better harvest programmes have been adopted within the business. The use of a common timeline relating interval days between harvest picking has allowed HHP to review the diverse harvest strategies with ease and to correlate these decisions of when crop was picked and the impact this has on labour productivity.

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Tracking inventory

WhereScape's feature to support history tracking allows HHP to project inventory trends over a timeline. Alex Gooi explains: "this sort of insight is fundamental to maintaining an effective stock programme which ensures we have sufficient levels of volume to support the 330 distinct lines we pack for our customers each day."

He continued: "Having an accurate understanding of our stock positioning is also central to our crop and accounting forecast initiatives. Particularly when it comes to our locally grown fruit. This enables us to calculate the total fruit tonnage harvested to date and determine with a degree of precision where our fields are within a harvest cycle and how aligned we are against our harvest programmes."

Field sensor information (future)

Field sensor information tracking climate, nutrient, light and soil moisture levels are normally isolated in numerous remote workstations around the business. Using WhereScape, HHP plans to exploit the potential of reconciling this data and build a single data silo within the data warehouse making it possible to compare results between fields.



In conclusion:

Concludes Gooi: "We have been delighted with the results WhereScape has achieved for us so far! Now that we are reporting from one central data warehouse, we are able to capture and store critical information whatever the data source and, as a result, provide more accurate and consistent reports across multiple business areas."

"We look forward to starting work on the next phase of data analysis from the field sensors and beginning to build some strong comparisons between sites and time periods."