Splunking the Farm
Agriculture, powered by the Splunk platform

Dennis Mohn  |  Technical Account Manager, SCC II
September 25, 2017  |  Washington, DC
Forward-Looking Statements

During the course of this presentation, we may make forward-looking statements regarding future events or the expected performance of the company. We caution you that such statements reflect our current expectations and estimates based on factors currently known to us and that actual events or results could differ materially. For important factors that may cause actual results to differ from those contained in our forward-looking statements, please review our filings with the SEC.

The forward-looking statements made in this presentation are being made as of the time and date of its live presentation. If reviewed after its live presentation, this presentation may not contain current or accurate information. We do not assume any obligation to update any forward looking statements we may make. In addition, any information about our roadmap outlines our general product direction and is subject to change at any time without notice. It is for informational purposes only and shall not be incorporated into any contract or other commitment. Splunk undertakes no obligation either to develop the features or functionality described or to include any such feature or functionality in a future release.

Splunk, Splunk>, Listen to Your Data, The Engine for Machine Data, Splunk Cloud, Splunk Light and SPL are trademarks and registered trademarks of Splunk Inc. in the United States and other countries. All other brand names, product names, or trademarks belong to their respective owners. © 2017 Splunk Inc. All rights reserved.
The Farm

What it’s all about …

… in a nutshell
Meteorological Data
We all depend on the weather

- Create weather forecasts
- Optimize pest management & fertilizer usage
- Plan best harvesting time
- Mandatory documentation for government and food control
The Past
How we did it in pre-Splunk times

- Meta data has been gathered with thermo-, baro- and hygrographs
  - All manual, had to be wound up twice a week
  - Spread around the farm
- Trends had to be checked multiple times a day
  - Yes, on all places around the farm
- Experience was needed to interpret the data correctly
- No means of alerting
Enter The Arena
The Devices

Gather ALL the data
Data Collection
Off-the-shelf hardware and Raspberry Pi
Weather Overview

Current and past situation at a glance
Forecasts and Recommendations
Unleash the power of the Splunk platform

<table>
<thead>
<tr>
<th>Gefahrenlage Infektionen</th>
<th>Bodendüngung</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mehltau</td>
<td>Stickstoff</td>
</tr>
<tr>
<td></td>
<td>Kultur</td>
</tr>
<tr>
<td></td>
<td>Phosphat</td>
</tr>
<tr>
<td></td>
<td>Magnesium</td>
</tr>
<tr>
<td>Gauschimmel</td>
<td></td>
</tr>
<tr>
<td>Wurzelfaule</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Score</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>✔️</td>
</tr>
<tr>
<td>9</td>
<td>✔️</td>
</tr>
<tr>
<td>85</td>
<td>⚠️</td>
</tr>
</tbody>
</table>
Will we do it again?
Less Time, Less Pesticides, More Fruit?

- Data collection time reduced dramatically (seconds instead of ~ 1 hour)
- Predictive measurements reduce reaction time
- Pesticides and fertilizer can be used on-time and in less quantities
- Documentation for food control agencies and government as easy as it can be

There is no evidence yet of increased yield due to unexpectedly bad weather conditions …

… but we will continue!
Thank You

Don't forget to rate this session in the .conf2017 mobile app