

| Use Case | Recording and analysis of the handling of cooking utensils | | | | 16 |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------------------------------|--------------------------------------------------|----|
| Context | As soon as the kitchen staff starts preparing food using a cooking utensil with integrated sensors, the system shall record and visualize the forces applied to determine improvements to their working methods, environmental conditions, and food use. | | | | |
| Domain | Cooking craftsmanship | Business Value | Personalization <input checked="" type="checkbox"/> | Acquisition <input checked="" type="checkbox"/> | |
| | | | Communication <input checked="" type="checkbox"/> | Optimization <input checked="" type="checkbox"/> | |
| | | | Control <input type="checkbox"/> | Analysis <input checked="" type="checkbox"/> | |

| Description | | |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Stakeholders & Interests</i> | <i>Stakeholder</i> | <i>Interests</i> |
| | Kitchen staff | Gain insights into own way of working; optimize own way of working; experience no restrictions in the usual way of working |
| | Manager | Recognition of the work performed and hand movements of kitchen staff; ability to draw conclusions about food and the kitchen environment; durable sensor technology |
| <i>Required Data</i> | Compression force from 0 to 25 Newton Bending force from -6 to 6 Newton Torsional moment from -0.33 to 0.33 Newton meters Crushing force from 0 to 2.5 Newton Start & end of the execution of an action with a cooking utensil Time and date | |
| <i>Current Conditions</i> | Current conditions are not presented as an example. | |

| Procedure | | |
|---------------------------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <i>Trigger</i> | The kitchen staff starts preparing a dish/ingredient and uses a cooking utensil with integrated sensor technology. | |
| <i>Use Case Procedure</i> | <i>Step</i> | <i>Activity</i> |
| | 1. Mark the start | The kitchen staff picks up the required cooking utensil and presses a button to mark the start of a sequence of activities. |
| | 2. Performing the activity | The kitchen staff carry out the activity (e.g. turning a fillet of beef) and the required forces are recorded. |
| | 3. Mark the end | The kitchen staff presses a button again to mark the end of a sequence of activities. |
| | 4. Assignment of activity steps based on data | The recorded force data is used to assign which step of the activity was carried out at which point. |
| | 5. Extraction of findings | The kitchen staff draws conclusions about the working methods, the environmental conditions and the food used. |
| <i>Use Case Anomalies</i> | <i>Step</i> | <i>Activity</i> |

| | |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------|
| | No information provided. |
| <i>Final State</i> | The kitchen staff can conclude relevant improvements for their working methods, the environmental conditions, and the food used. |

| Overlaps | | | | | | |
|------------------------------------------------------------------|-------------|-----------------------|-----------------|--------------------------|--------------|-------------------------------------|
| <i>Domain 2</i> | Preparation | <i>Business Value</i> | Personalization | <input type="checkbox"/> | Acquisition | <input checked="" type="checkbox"/> |
| | | | Communication | <input type="checkbox"/> | Optimization | <input checked="" type="checkbox"/> |
| | | | Control | <input type="checkbox"/> | Analysis | <input checked="" type="checkbox"/> |
| <i>Sum of Business Values total (incl. title domain, header)</i> | | | Personalization | 0 | Acquisition | 2 |
| | | | Communication | 0 | Optimization | 2 |
| | | | Control | 0 | Analysis | 2 |