Abstract

The notion of "business key drivers" is introduced and a method is described to link these key drivers to the product specification.
Example Motorway Management Analysis

Key-drivers

Safety
- Reduce accident rates
- Enforce law
- Improve emergency response

Effective Flow
- Reduce delay due to accident
- Improve average speed
- Improve total network throughput
- Optimize road surface
- Speed up target groups
- Anticipate on future traffic condition

Smooth Operation
- Ensure traceability
- Ensure proper alarm handling
- Ensure system health and fault indication

Environment
- Reduce emissions

Derived application drivers

Early hazard detection with warning and signaling
Maintain safe road condition
Classify and track dangerous goods vehicles
Detect and warn noncompliant vehicles
Enforce speed compliance
Enforce red light compliance
Enforce speed compliance

Requirements

Automatic upstream accident detection
Weather condition dependent control
Traffic speed and density measurement
Cameras
Deicing
Traffic condition dependent speed control

Note: the graph is only partially elaborated for application drivers and requirements
## Method to create Key Driver Graph

- **Define the scope specific.** in terms of *stakeholder* or *market segments*
- **Acquire and analyze facts** extract *facts* from the *product specification* and ask *why questions* about the *specification* of existing products.
- **Build a graph of relations between drivers and requirements** by means of brainstorming and discussions where requirements may have *multiple drivers*
- **Obtain feedback** discuss with *customers*, observe their reactions
- **Iterate many times** *increased understanding* often triggers the move of issues from *driver* to *requirement* or vice versa and rephrasing

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**Key Drivers How To**

Gerrit Muller

version: 0.2
June 21, 2020
TCAFkeyDriverSubmethod
# Recommendation for the Definition of Key Drivers

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Limit the number of key-drivers</td>
<td>minimal 3, maximal 6</td>
</tr>
<tr>
<td>• Don’t leave out the obvious key-drivers</td>
<td>for instance the well-known main function of the product</td>
</tr>
<tr>
<td>• Use short names, recognized by the customer.</td>
<td></td>
</tr>
<tr>
<td>• Use market-/customer- specific names, no generic names</td>
<td>for instance replace “ease of use” by “minimal number of actions for experienced users”, or “efficiency” by “integral cost per patient”</td>
</tr>
<tr>
<td>• Do not worry about the exact boundary between Customer Objective and Application</td>
<td>create clear goal means relations</td>
</tr>
</tbody>
</table>

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TCAFkeyDriverRecommendations
Transformation of Key Drivers into Requirements

**Customer**
- **What**
  - Customer objectives

**Derived Application Drivers**
- Derived Application Drivers

**Product**
- **What**
  - Functional

**Key (Customer) Drivers**
- Customer
  - How

**Application**
- Application

**Requirements**
- Functional

**Goal**
- means
  - may be skipped or articulated by several intermediate steps

**Functions**
- interfaces
  - performance figures