Abstract
This module addresses The Customer Objectives and Application Views:
The customer objectives view

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Abstract
The purpose of the customer objectives view is described. A number of methods or models is given to use in this view: customer key drivers to understand the essentials, value chains and business models to understand the position of the customer and a supplier map to understand the supply side of the customer.

Distribution
This article or presentation is written as part of the Gaudi project. The Gaudi project philosophy is to improve by obtaining frequent feedback. Frequent feedback is pursued by an open creation process. This document is published as intermediate or nearly mature version to get feedback. Further distribution is allowed as long as the document remains complete and unchanged.
Customer objectives overview

**Customer objectives**

**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
- Optimise 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 signalling
- Maintain safe road condition
- Classify and track dangerous goods vehicles
- Detect and warn non compliant vehicles
- Enforce speed compliance
- Enforce red light compliance
- Enforce weight compliance

**value chain and business models**

**suppliers map**

**Application**

**Functional**

**Conceptual**

**Realisation**

### Suppliers
- Philips CE-TV
- Sony
- Nokia
- Philips CE-DN
- Philips CE-PCC

### Manufacturers
- Loewe
- System Integrators
- ST
- LG
- TI
- Samsung

### Providers
- Fry’s
- it’s
- Dixon

### Competitors or Complementors
- Boonstra
- Peper
- Kok
- Chirac
- Blair
- Pietersen
- Smith
- Jones
- Jansen
- Muller
- Kleisterlee
- Clinton
- v.d. Spijker
- Meulengracht
- van Oranje
- Obbink
- v.d. Hamer
- Charite
- Cruijf
- Neeskens
- van Hanegem
- Goedkoop
- Sharon
- Bakker
- v.d. Meulen
- Hoessein

### System Integrators
- Sony
- Philips Semiconductors
- ST
- Samsung
- Micron
- Philips Semiconductors
- Intel

### Component and Platform Suppliers
- Philips Components
- Liberate

### Competitors or Complementors
- suppliers
- 1, 2, 3, 4, 5

**The customer objectives view**

Gerrit Muller

version: 0.3
July 24, 2014
COVoverview
Example motorway management key drivers

<table>
<thead>
<tr>
<th>Key-drivers</th>
<th>Derived application drivers</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>Reduce accident rates</td>
<td>Early hazard detection with warning and signaling</td>
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</tr>
</tbody>
</table>

Note: the graph is only partially elaborated for application drivers and requirements
Submethod to Link Key Drivers to Requirements

- 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
### Key Driver Recommendations

<table>
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<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>
Example value chain

Consumers

Providers

Retailers

System Integrators

Component and Platform Suppliers

Providers

Retailers

System Integrators

Component and Platform Suppliers

Consumers
competitors or complementers?

Suppliers of appliances, services and content are colour coded.

The customer does business with many suppliers, and has to integrate the products of many suppliers.
The application view

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Abstract
The purpose of the application view is described. A number of methods or models is given to use in this view: stakeholder and concerns, context diagram, static entity relationship models and dynamic flow models.
Stakeholders and concerns MRI scanner

- Government: cost of care
- Financial Director: cash flow, cost of op.
- Insurance: cost of care
- Administration: patient id, invoice
- General Practitioner: patient
- Ref. Physician: diagnosis, treatment
- Radiologist: diagnosis, reimbursement
- Nurse: patient, ease of work
- Patient: comfort, health
- Family: support
- IT Department: conformance, security
- Facility Manager: space, service supp.
- Maintainer: accessibility, safety
- Cleaner: accessibility, safety
- Legend:
  - Administrative
  - Clinical
  - Patient
  - Support

The application view

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AV stakeholders
The application view

The context of motorway management system involves various elements, including:
- Maintenance contractors
- Environmental monitoring
- Special applications
- Needed for contingencies
- "Add-ons"
- Third party
- Other concerns
- Fleet management
- Urban traffic control
- Advanced vehicle control
- Administrative
- Special destinations
- Specialized segments
- Toll tunnel
- Car repair
- Towing service
- Restaurants
- Gas stations
- Bus lanes
- Lorry lanes
- Airports
- Railways
- Taxes
- Car administration
- Government
- Competing or cooperating?

Specialized segments needed for contingencies, "add-ons", and special applications are also considered significant aspects of the motorway management system.
Example of simple TV application model

The application view

channel → transmits

selects

soaps
movers
sports
news
canned

described by

age, sex, violence attributes

content

TV

tuner

TV screen

parents

children

video recorder

tuner

storage

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AVsimpleTVmodel
Examples of dynamic models

flow models

state diagrams

time line

The application view

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AVdynamicModels
Productivity and Cost models

Typical use, events, configuration, working conditions lead to a productivity model. This model determines the production rate.

The Cost Of Ownership model breaks down the costs into different categories: radiologist, nurse, security, administration, operator, personnel, consumables, service, facilities, financing.
Dynamics of an URF examination room

8:30
9:00
9:30
10:00
10:30

- patient 1, intestinal investigation
- patient 2, simple X-ray
- patient 3, intestinal investigation
- patient 4, intestinal investigation
- patient 5, intestinal investigation

URF examination room
changing room
waiting room

The application view

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AVdynamicsURF
Exercise Customer Side

- Determine stakeholders, key drivers and context of the product.
- Translate these drivers into application drivers and link them to the requirements.
• Create a (max) 8 sheet presentation describing the customer objectives and application.