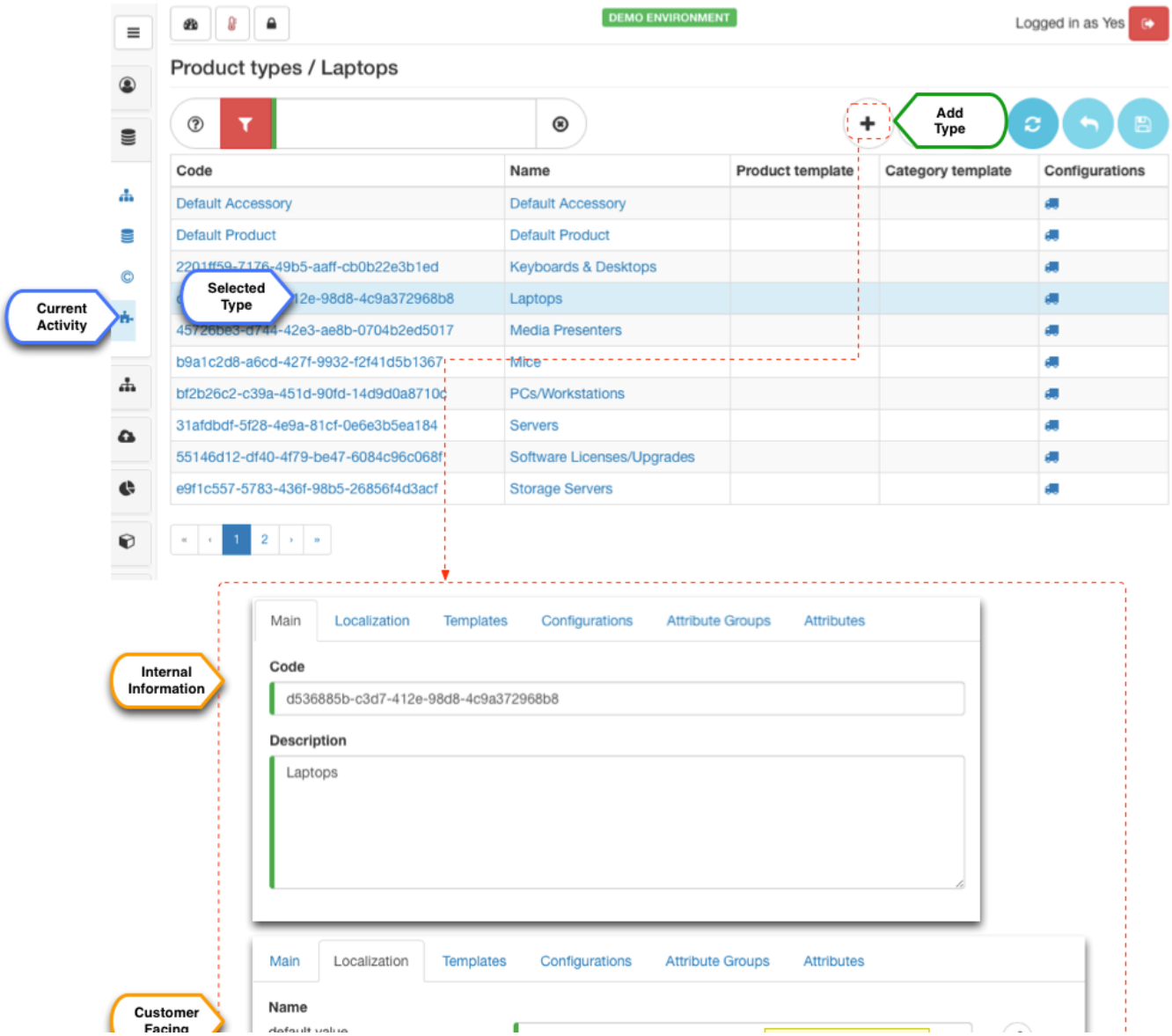
Product types

- Product types management
  - Customer Navigation Aspect
  - Templates
  - Configurations
  - Attributes, search and navigation
  - Non restrictive attribute set
  - Product type view

Product types management

Product type definition provides a description of product attributes targeting aspects of:

- presentation - i.e. what details are relevant on product details and product comparison?
- search and navigation - i.e. which attributes are relevant for searching and which one are important enough to be part of navigation?
- internal information - i.e. supporting information to aid checkout and fulfilment processes and any other functional needs in custom implementation (e.g. themes templates and CMS dynamic content)

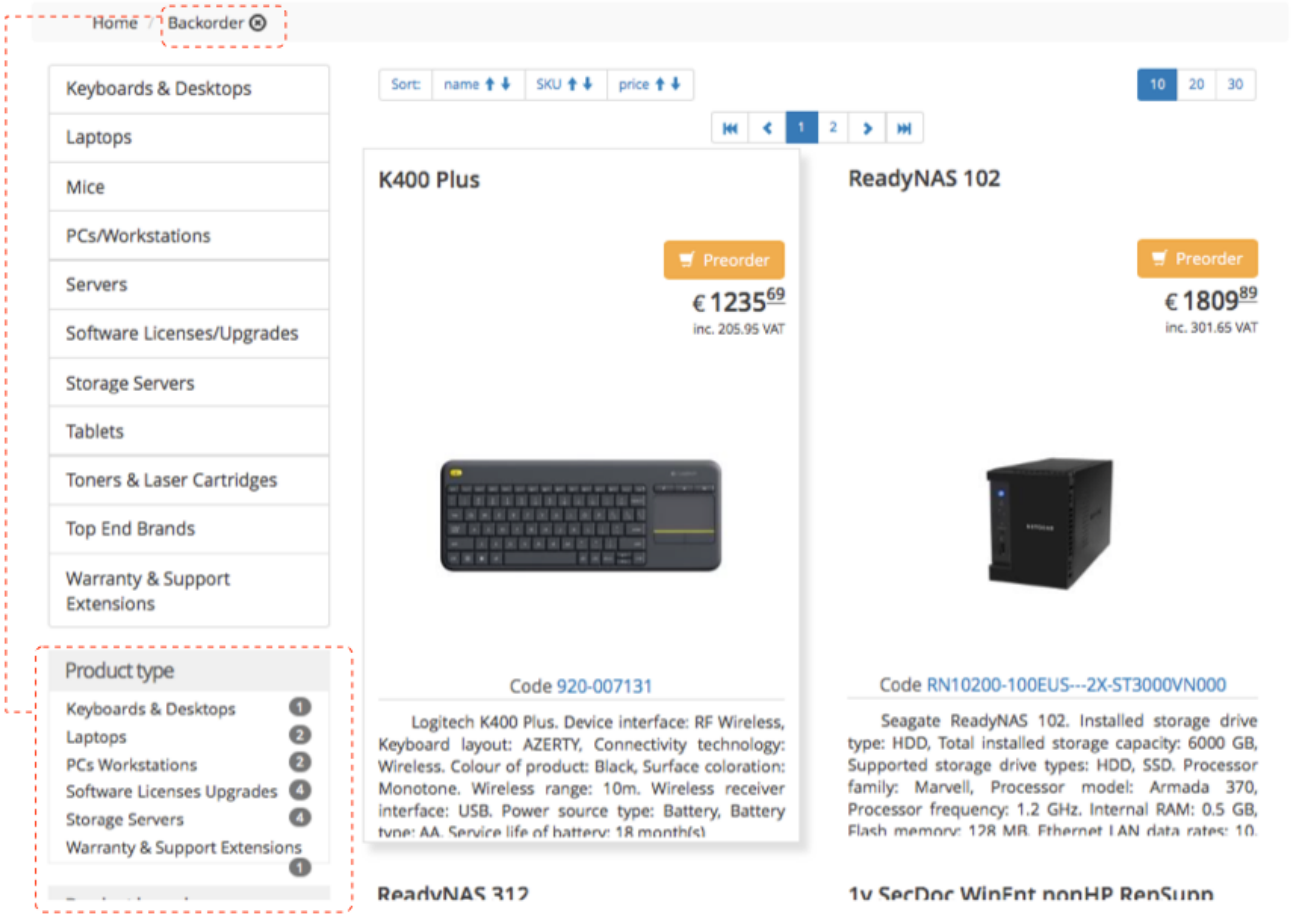


Customer Navigation Aspect

Product types are providing *classification* for products and as such might be useful for the customer as search criteria or means of navigation. All product types names are made available as a special *navigatable* attribute **productType**, which can be referenced from within Product type attributes itself. This is very powerful when depicting product types in a hierarchical form.

Consider the following use case when a shop specialising in fashion products has top level categories: "for women", "for men" and "for kids". It is possible to define an abstract product type for each of these categories and reference product type within its definition as a navigatable attribute. Each category will contain a multitude of products of different types such as "dresses", "tops", "shoes" etc. Therefore when navigating to category "for women" we will see an attribute navigation block which would list how many dresses, tops and shoes there allowing customers easily to navigate to desired kind of product and streamline the checkout process.

An example of this in our demo shop looks like this: when searching by tag we are able to see a product type navigation block and use it to navigate to the "type" of product we are interested in the most given whatever search criteria we have used prior getting to this page:



Templates

Templates configurations are used as means of extending the UI views for category lister and product details pages. By specifying a template in each of these input fields the platform when rendering the UI will attempt to use a variation of templates.

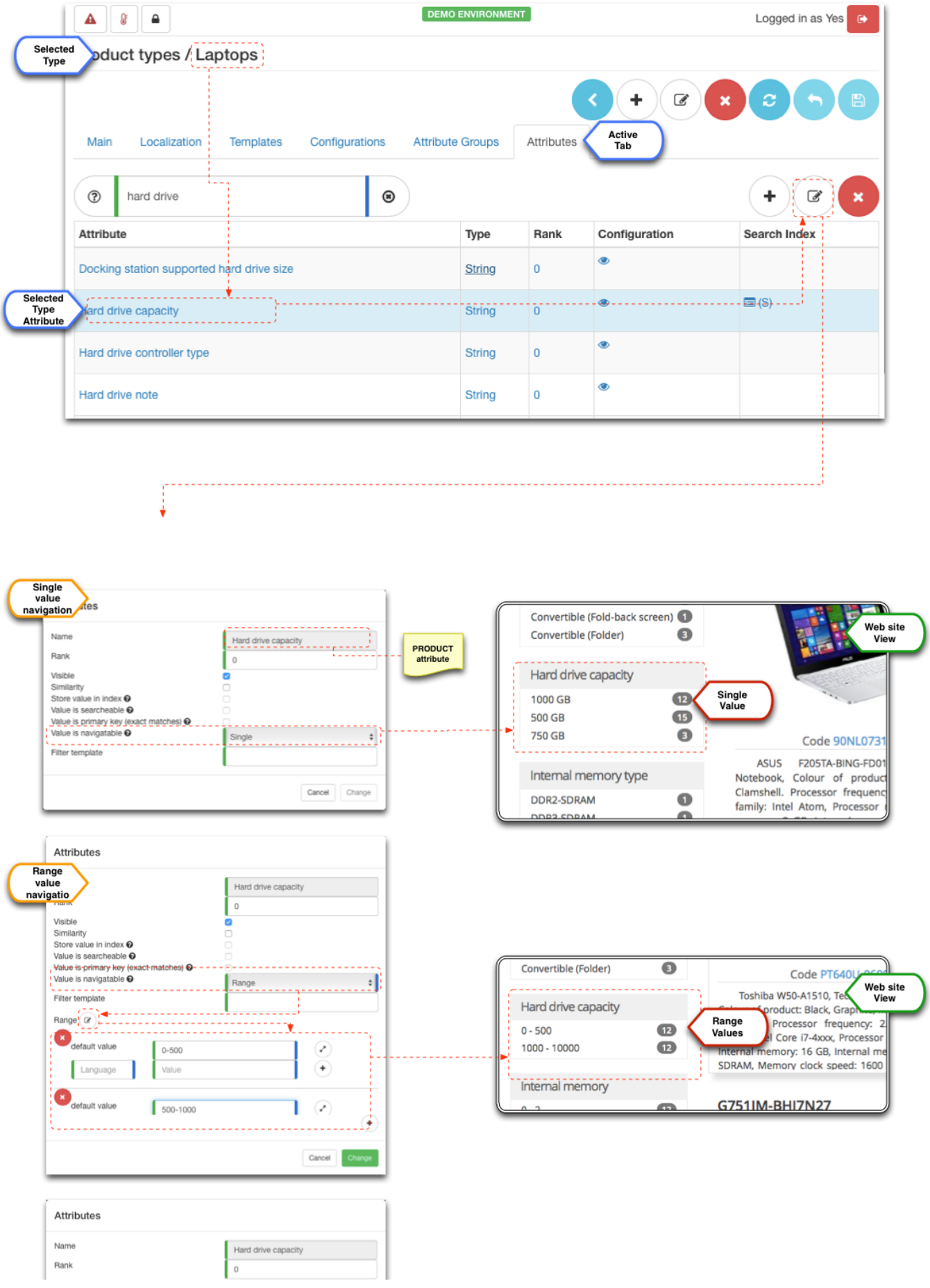
This creates flexible mechanism for theme framework to provide a different presentation layer that is unique to particular product type in order to increase customer conversion.

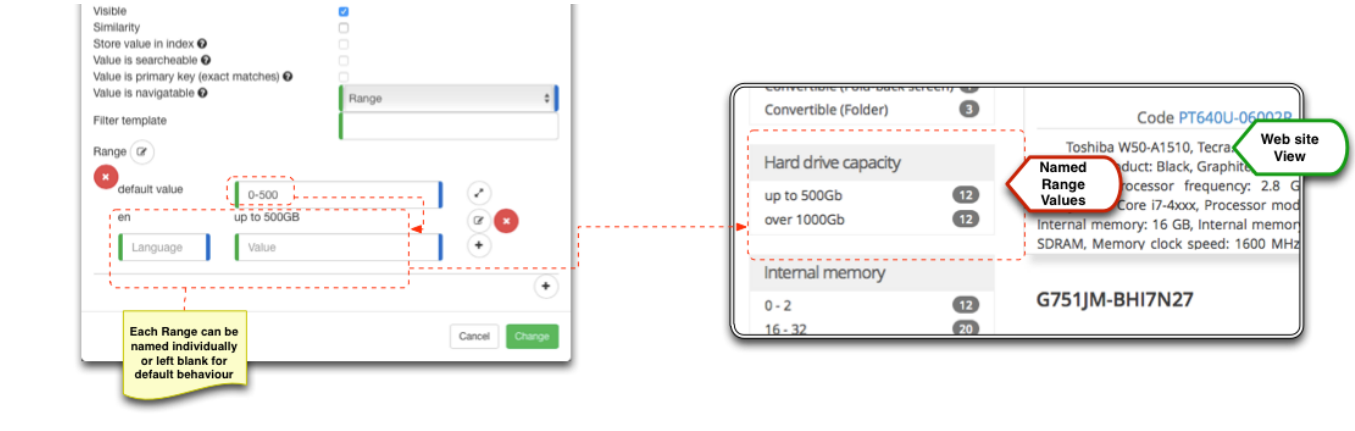
Configurations

Flag	Intended purpose	Functional impact
Services	Defines a product which is a service, e.g. warranty, license or a subscription	
Collection	Defines a product which is a group of products/bundle	
Shippable	Defines a tangible product that is deliverable	
Downloadable	Defines a product that can be delivered via download link	
Digital	Defines a digital product that does not need a physical delivery	Used by default order splitting strategy to put these products into **D4** (Electronic delivery group)

Attributes, search and navigation

Product type can contain multitude of attributes from PRODUCT group, referred to as "product type attributes". Product type attributes provide a link between attribute definitions and the product type, and add semantic information to the data presentation functions such as search and navigation, sorting, comparison etc.


DEMO ENVIRONMENT
Logged in as Yes
Selected Type
oduct types / Laptops
Active Tab
Main
Localization
Templates
Configurations
Attribute Groups
Attributes
hard drive
Attribute
Type
Rank
Configuration
Search Index
Docking station supported hard drive size
String
0
Selected Type Attribute
ard drive capacity
String
0
(S)
Hard drive controller type
String
0
Hard drive note
String
0
Single value navigation
Name
Hard drive capacity
Rank
0
Visible
Similarity
Store value in index
Value is searcheable
Value is primary key (exact matches)
Value is navigatable
Single
Filter template
Cancel
Change
PRODUCT attribute
Convertible (Fold-back screen) 1
Convertible (Folder) 3
Hard drive capacity
1000 GB 12
500 GB 15
750 GB 3
Single Value
Internal memory type
DDR2-SDRAM 1
Web site View
Code 90NL0731
ASUS F205TA-BING-FD01
Notebook, Colour of product
Clamshell. Processor frequenc
family: Intel Atom, Processor
Attributes
Range value navigatio
Range
default value
0-500
Language
Value
500-1000
Convertible (Folder) 3
Hard drive capacity
0 - 500 12
1000 - 10000 12
Range Values
Internal memory
G751IM-BHI7N27
Web site View
Toshiba W50-A1510,
Processor frequency:
Core i7-4xxx, Processor
Internal memory: 16 GB, Internal me
SDRAM, Memory clock speed: 1600



Adding attribute is a trivial task, which simply involves picking attribute from a PRODUCT group and setting **visible** and **similarity** flags and sorting **rank**. Search and navigation flags are inherited from the attribute definitions and cannot be changed from this editor. You can modify these from the attribute management section.

Visible allows to specify if attribute should be visible to customer (specifically in filters, product details and comparison pages)

Similarity flag reserved to identify similarity between products (not currently used by platform)

Rank can be used for specific sorting of the attributes. If rank for all attributes is the same then alphabetical sorting is applied.

> Rank can be very efficient when a particular attribute needs to be highlighted by putting it at the top of the list (as we know from physiology people only look for about top 7 things). Additionally this sorting also applies when rendering filter navigation blocks, which is even more important then attribute sorting.

Search and **Navigation** flags allow to define which attributes will contribute keywords to the full text index. As we touched upon the subject of product search in the product types overview this mechanism allows to identify attributes that have "clean" data and will provide good keywords thus making the customer product searches relevant. If either flag is turned on the values from product data for that attribute will be analysed and stored in full text index thus making this data searchable. The difference between **Search** and **Navigation** is that only attributes marked as **Navig ation** will contribute to the filtered navigation menu. To put it simply **Search** and **Navigation** attributes are searchable by customer via search input box, but only **Navigation** attributes will form additional navigation menu with value counts. Note that attribute navigation must be enabled at the category level.

Navigation blocks come in three flavours:

- **Single** - presenting list of unique attribute values that are applicable in current search, when selected applies AND condition thus reducing the result to single option
- **Multi** SaaS - similar to Single but allows multiple selection, when selected applies OR condition thus reducing the result but allowing additional filtering on the same attribute
- **Range** - numeric range criteria, when selected applies range condition, which can be presented as range values or have a human readable name as specified in range configuration

> Navigation attributes are very efficient at presenting information and very easy to use for the customers. However business user must take precaution not to overload the customer with menus and therefore it is recommended to carefully **select navigation attributes** to include only most important ones **that will make the difference between the "sale" and "no sale"**.

> Enterprise level shops (*hundreds thousands* of products) should also note that calculating counts adds additional load onto the system thus a balance should be established between usefulness of data and its implications on the system performance and therefore customer experience.

Non restrictive attribute set

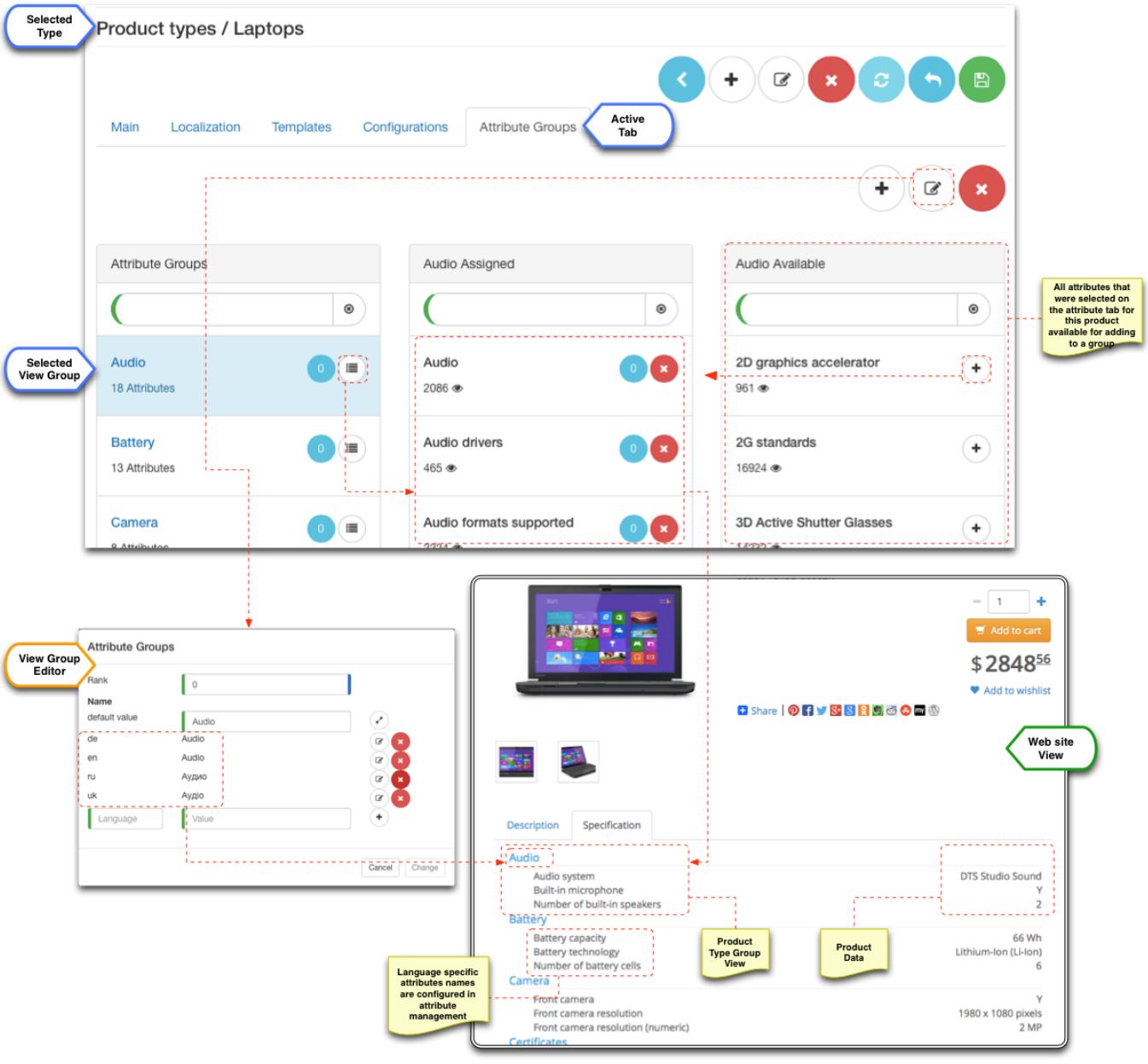
Product type only suggests typical set of attributes that best describe product to the customer or will allow it to be searched for, however **it does not restrict business user in terms of product data entry**. It is a valid and supported use case to import more attribute values to the product than is defined by its product type. Additional attribute data will still be accessible via products editor "attributes" tab as any other attributes defined by the product type.

Product type view

Product type view refers to all product type view groups declared for a product type. Collectively these **groups provide a complete view of the product from different angles** such as design, features, technical parameters and specifications. Any number of view groups can be created for a product type.

Localisation of the name of the group follows the same procedure as any other language sensitive component. Localisation of the the attribute names within the group comes from PRODUCT attribute definition. Localisation of the values comes from the product attribute values directly, if the value type supports localisation, otherwise actual value is displayed.

Once the group is declared product type attributes can be assigned to it. Note that same attribute can be present in several groups if necessary and it is up to the business to decide what groups are applicable and what attributes should they contain. End result of this configuration can be seen on the product details page, namely product "Specification" tab or comparison page SaaS .



Note that in default theme view groups and attributes within them only appear if currently viewed product has values for those attributes. So **there no tedious work having to align data across the whole product data set**. Whatever data is in PIM will be presented to the customer, whatever is not there is skipped lest clutter the page.