LIFECYCLE SPECIFICATION e.g. what happens from preproduction to recycling in DIGITAL BEER, developed by UPCODE™





OPTICAL TAGS WITH SENSOR

In addition that each UpCode is unique, each UpCode has a sensor which reacts to different conditions. Now every item can monitor variables like temperature, huminidity, time or light. And provide valuable information to stakeholder.

These sensor values are transmitted to the UpCode platform each time a UpCode is scanned, providing information about the items current or past conditions.





When brew starts its journey to consumer, information about its preproduction has already been stored into production database.

As specific brew is made, its entry is stored into the database and linked to preproduction materials and their producers

When the beer is bottled, each bottle is given a unique tag. This tag identifies each bottle during its lifecycle and gives user access to information relevant to this certain bottle.

packaging

During the packaging process, number of bottles are placed in to same package. Each oliginal fleer package gets its own unique tag

too.

package is linked to same package in the database.

This makes it possible to track items via the package during upcoming lifecycle events.



transport



In transport it's crucial to know that the correct product ends up to correct market (and to correct stores).

Each **Digital barn** bottle has a defined lifecycle which makes it possible to check the origin of the item and its defined destination at any stage of its lifecycle.

IMPORTANT NOTE

Having a predefined lifecycle makes it possible to orevent frauds. As consumers and authorities are able to check if the product is sold in the correct location by its authorised reseller.

This is also important when when considering item

When items arrive in the store, personell can verify that they have been transported in sufficient conditions and that they have arrived at the tight destination

This information together with important information like transport time is available to users of UpCode. So that for example manufacturer of the product can improve their processes or consumer can verify that the product really is



retail



🕡 IMPORTANT EVENT

If consumer scans item at store, information about items manufacturing conditions are shown. Also suggestions about related products and previous lifecycle data is displayed.

Information that the consumer gets can boost sales and consumers that prefer certain types of items are willing to more if product fits their portofolio or is customisable.

When item leaves store and its scanned at POS, information about items shelf time is recorded and the location where item was bought is stored.

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consumption

When a user scans an item at home, it is possible to register the item to private portofiolio. This engages consumer anonymously directly to manufacturer of the item and makes it possible to order personalised products; products that not only have their own label but also customised content, like customised Digital Beer.

Each consumer can now have their own private portofolio, this portofolio holds anonymous data about the consumer habits, and consumer can register items into this portofolio. This protofolio is totally private and anonymous and is used to provide better use exprience to consumer.



Each UpCode contains a sensor, this sensor can tell consumers if items of use are still valid for use. In case of Digital Beer it tells consumer about the optimal drinking temperature for this specific brew. This information can also adapt to consumer



7 IMPORTANT EVENT

If consumer has registered product into private portofolio, it is possible for manufacturer to contact the consumer (without having to resolve their identity) by pushing messages to the consumer. This is important in case of product callbacks.





Before recycling it is important to provide consumer with details about where and how the product should be recycled.

When a recycling event eventually happens, its valuable information to manufacturer to know that, item has been recycled and also where it was recycled. This is also valuable information to authorities.





Inorder to see Digital Beer in action request more material from www.upcode.fi or visit UpCode at Vaasa/Finland

