

Link 13.1 Example Analysis of Pervasive Context

Match Lighting placed a RFID tag on pallets of light fittings to monitor the movement of the pallets.

When a pallet passed a RFID reader, the following data were captured:

10:55:21 015544181

The data definitions provided by the business rules, documented in the data dictionary indicate that:

10:55:21 is a time in the form of HH:MM:SS

015544181 is the unique identifier of a pallet.

Dey & Abowd (2000) suggest that the primary context can be determined by four factors: location, time, identity (of entity) and activity. Table 13.1.1 applies these factors to define the primary context for the pallet data in Match Lighting.

Table 13.1.1: Defining the Primary Context

Factor	Description	Data
Location	The location of the RFID sensor in Match Lighting.	MLW21B
Time	The time of the event.	10:55:21
Identity	The identifier of the pallet.	015544181
Activity	The event that happened.	Identifier passed RFID reader.

From this primary context, further information about the entity can be determined, forming the secondary context (Dey & Abowd, 2000). For example, the location code MLW21B can be used to determine that the source of the data is the RFID reader in one of Match Lighting's outbound warehouse loading bays. The pallet identifier 015544181 can be used to trace where else the pallet has been, and what it contains. The initial information that can be derived from the data are therefore that pallet number 015544181 was at the outbound warehouse loading bay at 10:55:21.

Reference

Dey, A. K. & Abowd, G. D., (2000), 'Towards a Better Understanding of Context and Context-Awareness', *Proceedings of the CHI 2000 Workshop on The What, Who, Where, When, and How of Context-Awareness*, The Hague, Netherlands, April, <ftp://ftp.cc.gatech.edu/pub/gvu/tr/1999/99-22.pdf>, date accessed 21 September 2013.