

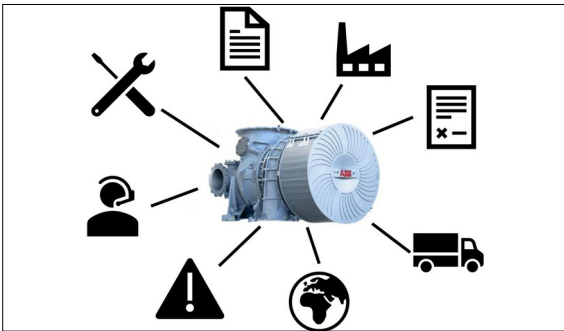


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Subject Area	Innovation in Products, Processes and Materials - Business Engineering and Productions
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## Unique identification and gapless traceability of parts

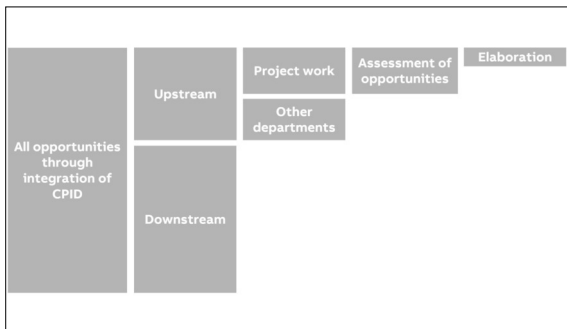
### Process improvement opportunities along the entire value chain



The central approach of the CPID allows to collect and store data along the entire value chain

**Introduction:** ABB establishes a unique component and part identification (CPID) for every key-part of their new products. The company wants to gain a competitive advantage through this CPID. The main focus thereby is a better protection against plagiarism and new service offerings for the customers of ABB.

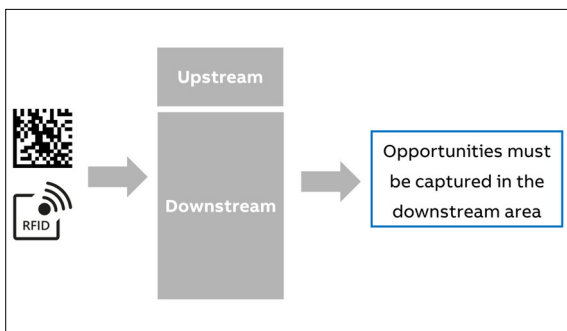
**Objective:** The CPID can be used over the entire lifecycle of the product and thereby it is an enabler to realize process improvements along the whole value chain. Whereas in downstream processes major business opportunities have been evaluated, in upstream area however the benefits are not analyzed in detail yet. The project thesis addresses this topic and therefore provides an overview about possible upstream process improvement opportunities enabled by the CPID. Furthermore, the project assesses the opportunities regarding coverage through other projects, monetary benefits and qualitative aspects. The most promising opportunity will be analyzed further. Thereby the current process is shown as well as a detailed definition of the target process - including process operation diagrams, explanation of the data structure, clarification of changes for ABB and supplier as well as a detailed monetary analysis of all expected benefits.



Procedure in the project work

**Result:** The main upstream advantage through the CPID, which is not covered from another ABB project, is an easier traceability of documents and more efficiency in document handling. The first step regarding this would be an improved process in the goods entry department. The posting of the goods entry is done more efficiently by scanning the identification on the delivery instead of the manual posting. In addition, there is less archiving necessary in the future. Other benefits are less wrong bookings and more efficient information search in all departments. The project thesis shows different opportunities to improve ABB processes along the value chain with the focus on upstream process opportunities. Therefore, it is recommended to commit the not elaborated opportunities to the responsible departments for further clarification of benefits and detailing. The defined process in goods entry should be implemented as described in this project thesis.

Due to several project work in the area of CPIDs, the work also draws a conclusion regarding opportunities through unique identifications. It becomes clear that the consistent use of CPIDs creates easily implementable upstream opportunities very quickly. However, in the longer term there are more opportunities in the downstream area which companies should use to generate added value for the customer and thus a competitive advantage.



Conclusion of several projects in the area of CPID