Case Design Sheet

1. CASE DESCRIPTION

Optimization of the orders flow process through solutions of the digital workflow of details and interactive warehouses in an additive manufacturing environment.

PARTNER	LOCATION	TIME/DURATION
Technology Applied	Poland, BIałystok	2018.01 - now

2. DIGITAL TRANSFORMATION CHALLENGE

2.1. BUSINESS TRANSFORMATION

Industry: additive manufacturing

- Improving communication between the client and the contractor,
- Simplify of the ordering procedure (time, order warehouse - digital details, quotation),
- Optimization: Cost reduction, elimination of human errors in the manufacturing process,
- Introducing functionality for the customer: intuitiveness in the ordering process; details flow monitoring and implementation stage

2.2. CONCEPTUAL TRANSFORMATION

- Internal Integration of the CRM ERP MES and BI mechanism
- External integration of the CRM ERP client system with the manufacturer's (contractor) digital magazines (warehouse)
- Development of the concept of work flow for automatic acquisition of external orders
- Development of human - human communication; human - system
- Developing of "front end" of the system interface

2.2. TECHNICAL TRANSFORMATION

- Use of cloud solutions
- Server installation
- Integration of devices and workstations
- Software provider
- System integrator

3. SOLUTION

- assurance cyber security in the circulation (work flow) of digital details by owning servers with cloud solutions and protection of details by encryption

- assurance real-time communication of devices and employees to present the current status of the client's order

4. KEY SKILLS AND COMPETENCES

The implementation of the solution has required a set of key skills and competences. Key skills and competences required have been:

- Process design and optimisation
- Technological advisory competencies
- Business analysts and programmers
- System integration

5. RESULTS

The target result of the planned implementation is the achievement of two main stages (milestones) of the process of integration of management systems, communication and dedicated software

- achieving the stage of automatic details (parts) upload
- achieving the automatic quotation stage

6. CONCLUSIONS AND RECOMMENDATIONS

The solutions proposed by the supplier indicate the possibility of achieving benefits for customers and cooperators

- increasing the speed of order fulfillment, improving communication between the client and the contractor,
- ongoing monitoring of orders and the stage of implementation
- minimizing possible human mistakes
- reduction of costs of preparing documentation and the technological process of manufacturing parts

7. REFERENCES

8. APPENDICES

No appendix