Joint Event
Focus Demo
4ZDM Cluster

24th Nov, EC premises (Brussels)

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GKN Aerospace Norway - ForZDM

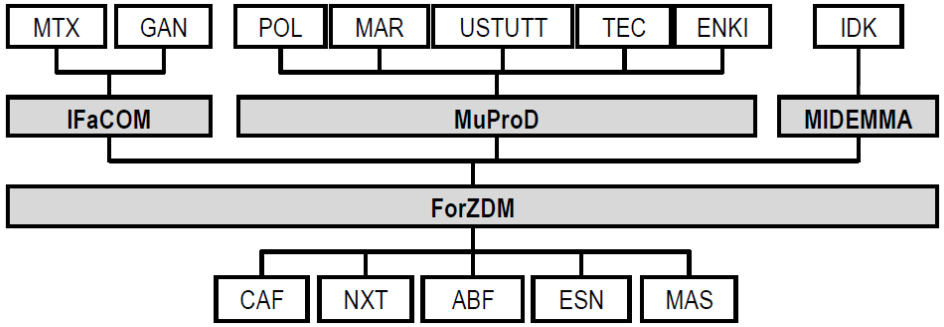
Structure

- Key data
- Concept or vision
- Technical approach
- Demonstrators
- Partnership
- Expected results & outcomes

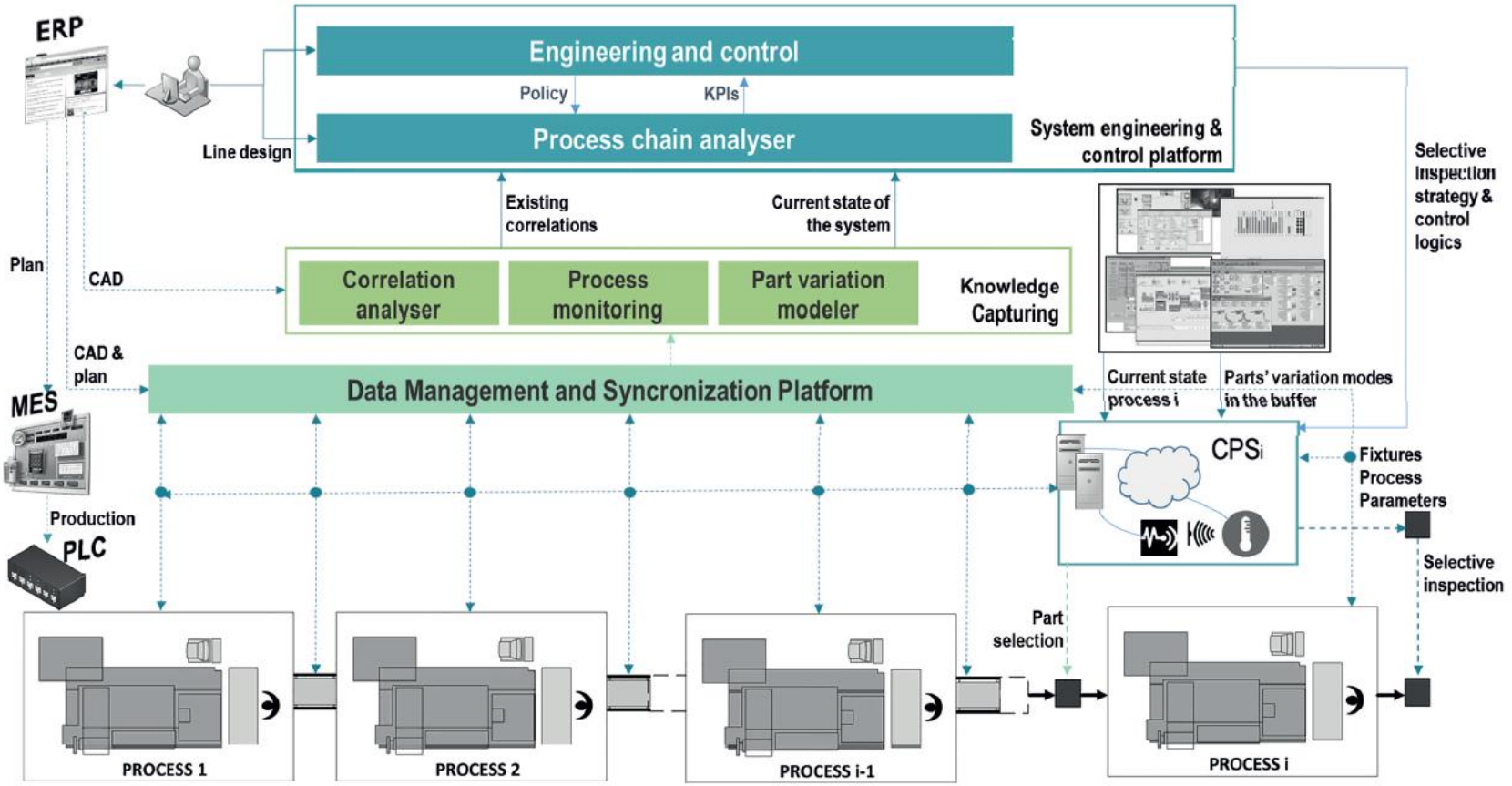
Key data

Consortium: 13+2 partners
Countries Involved: 6
Duration: 4 years
Start: Oct 2016 | End: Sep 2020
Budget 7,565 M€ | Funded: 5,896 M€
Total Effort: 842 PM

The consortium involves partners (60%) from previous ZDM projects (MuProD, IFaCOM, MIDEMMA)



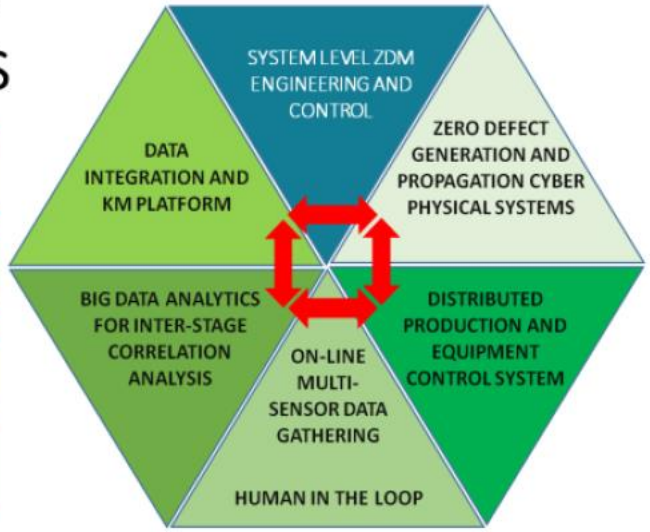
Concept or vision



Technical approach

KEY ENABLING TECHNOLOGIES

- MULTI-LEVEL PROCESS – SYSTEM MODELING
- CYBER-PHYSICAL SYSTEMS
- BIG DATA AND ANALYTICS
- REAL-TIME DATA MANAGEMENT

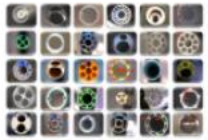


DEMONSTRATION

CAF

GKN AEROSPACE

ENKI

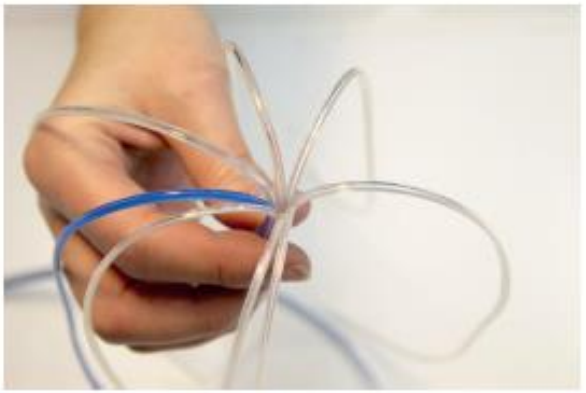


IMPACT

- REDUCTION OF PRODUCTION COST
- INCREASED PRODUCTION FLEXIBILITY
- HIGHER PRODUCTION RATES
- REDUCTION OF WASTE AND SCRAP
- NEW ZDM SYSTEM LEVEL STRATEGIES

Demonstrators

Jet Engine Shaft



Medical Microcatheters

Railway Wheelset

GKN AEROSPACE
AEROSPACE

ENKI
engineering & manufacturing
MEDICAL

CAF
RAILWAY

Partnership

No	Participant organisation name	Acronym	Country	Role
1 (C)	GKN Aerospace Norway AS	GAN	Norway	IND
2	ENKI srl	ENKI	Italy	SME
3	Construcciones y Auxiliar de Ferrocarriles, S.A.	CAF	Spain	IND
4	Politecnico di Milano, Dipartimento di Meccanica	POL	Italy	UNI
5	ABF Industrielle Automation GmbH	ABF	Austria	SME
6	Fundacion Tecnalia Research & Innovation	TEC	Spain	RTD
7	IDEKO S. Coop.	IDK	Spain	RTD
8	Montronix GmbH	MTX	Germany	SME
8.1	Montronix S.r.l (Linked Third Party)	MTXITA	Italy	SME
9	Marposs S.p.A	MAR	Italy	IND
10	EnginSoft Nordic AB	ESN	Sweden	SME
10.1	EnginSoft S.p.A (Linked Third Party)	ES	Italy	SME
11	nxtControl GmbH	NXT	Austria	SME
12	University of Stuttgart, Institute for Control Engineering of Machine Tools and Manufacturing Units (ISW)	USTUTT	Germany	UNI
13	Masmec S.p.A	MAS	Italy	SME

MANUFACTURING INDUSTRY

GKN AEROSPACE AEROSPACE

ENKI engineering & manufacturing MEDICAL

CAF RAILWAY

TECHNOLOGY PROVIDERS & SYSTEMS INTEGRATORS

Montronix MONITORING SOLUTIONS

NXT CONTROL

MASMEC

ABF

MARPOSS

ENGIN SOFT

RESEARCH INSTITUTIONS

tecnalia Inspiring Business

POLITECNICO DI MILANO

IK4 IDEKO Research Alliance

Universität Stuttgart ISW

Expected results & outcomes

DEMO	KPI	ForZDM Impact
GKN AEROSPACE	Lead Time	- 30%
	Scrap	- 50%
	Production cost	- 25%
ENKI engineering & manufacturing	Scrap	-50%
	Scrap microcomponents	-20%
	Scrap assembly	-70%
	Production cost	-20%
CAF	Defective parts	- 20%
	Rework time	- 25%
	Lead Time	- 10 %