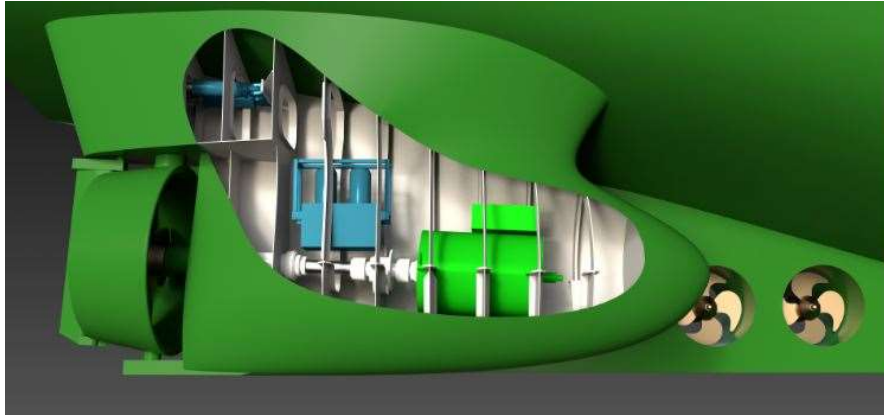


Effective Project-based Production



Erlend Alfnes, NTNU (erlend.alfnes@ntnu.no)

12 May 2022

SMARTLOG

Smart logistics in dynamic supply chains

The network

Established by NTNU and SINTEF in 2002 as a network for manufacturing and logistics companies

Vision

To provide knowledge about logistics to Norwegian industry

www.smartlog.no



@smartlognorge



@SMARTLOG_Norge



Kunnskap for en bedre verden

SMARTLOG
Tilfører norsk industri høy internasjonal kompetanse om verdikjedestyring og produksjonslogistikk

NTNU
Norwegian University of Science and Technology

SMARTLOG Om ▼ Forskning ▼ Arrangement ▼ Utdanning Nyheter ▼ Kontakt English summary

> Smartlog

Forskning

Forskningsmiljøet i SMARTLOG er involvert i en rekke ulike typer prosjekter med et bredt utvalg av problemstillinger

Aktuelt

- Blog on 49th EurOMA 09.07.2017
- To nye stipendiatler Innen helselogistikk 22.06.2017
- Ny utlysning av stipendiat 20.06.2017
- Bærekraft: Kan teknologien redde oss? 16.06.2017
- Automatisert produksjon i verdensklasse 16.06.2017
- EET 2017 - Trondheim 19.05.2017
- EET 2017 05.05.2017

Arrangement

IWAMA 2017
7th International Workshop on Advanced Manufacturing and Automation
Chongqing, China
Chongqing Institute of Technology

TRANSPORT & LOGISTIKK 23-24. oktober 2017
Clarke Hotel & Congress Data Report

Tweets by @SMARTLOG_Norge

- SMARTLOG @SMARTLOG_Norge
Vi ønsker årets nye studenter velkommen til NTNU! #Trendervær #NTNU #NTNUstudent
Aug 18, 2017
- SMARTLOG @SMARTLOG_Norge
Take a look at the blog post about our PhD candidates reflections of @EurOMA2017! goo.gl/zjW8Uk
Jul 24, 2017
- SMARTLOG @SMARTLOG_Norge
Congratulations @tjetland!

Embed View on Twitter

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NTNU Production Management Research Group

Faculty



Fabio Sgarbossa
Professor, group leader



Jan Ola Strandhagen
Professor



Erlend Alfnes
Associate Professor



Marco Semini
Associate Professor



Anita Romsdal
Associate Professor



Mirco Peron
Associate Professor

PhD candidates



Aili Biriita Berntum
Logistics in hospital laboratories



Jo W. Strandhagen
Next Generation Engineer-To-Order Manufacturing Operations



Swapnil Bhalla
Planning Delivery Dates in Engineer-to-Order Manufacturing



Marco Simonetto
Design of Assembly 4.0 systems



Vivek Vijayakumar
Human-Centered Logistics Systems



Mina Rahmani
Smart PPC in Food Supply Chain



Cosmin Aron
Digital Sustainable Logistics



Taravat Nehzati
Production planning for production networks



Gabriele Hofinger Jünge
Integrated planning and control in Engineer-to-order supply chains

NTNU'S LOGISTICS 4.0 LAB

Research: testing micro-logistics & macro-logistics, studying of the impact of new technologies on logistics systems, creating new knowledge on design and management of future logistics systems.

Company collaboration: suppliers of new technologies and production & logistics solutions, Norwegian companies interested

Education: innovative learning approaches through activities in real life logistics systems: *learning games, project-works, specialization and master projects*)

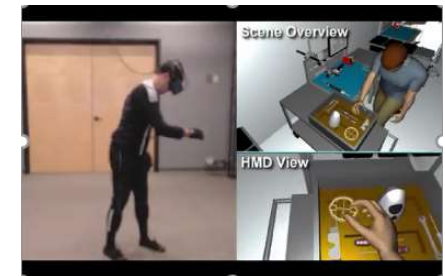
Examples of projects and applications



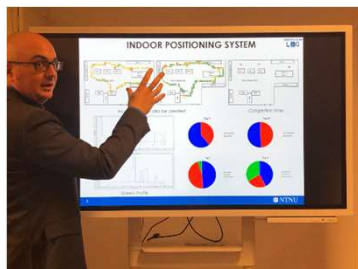
Assistive Tech. for Workstation



3D mapping



Motion Capture System



Indoor positioning system



Autonomous Mobile Robots



Autonomous Wheels



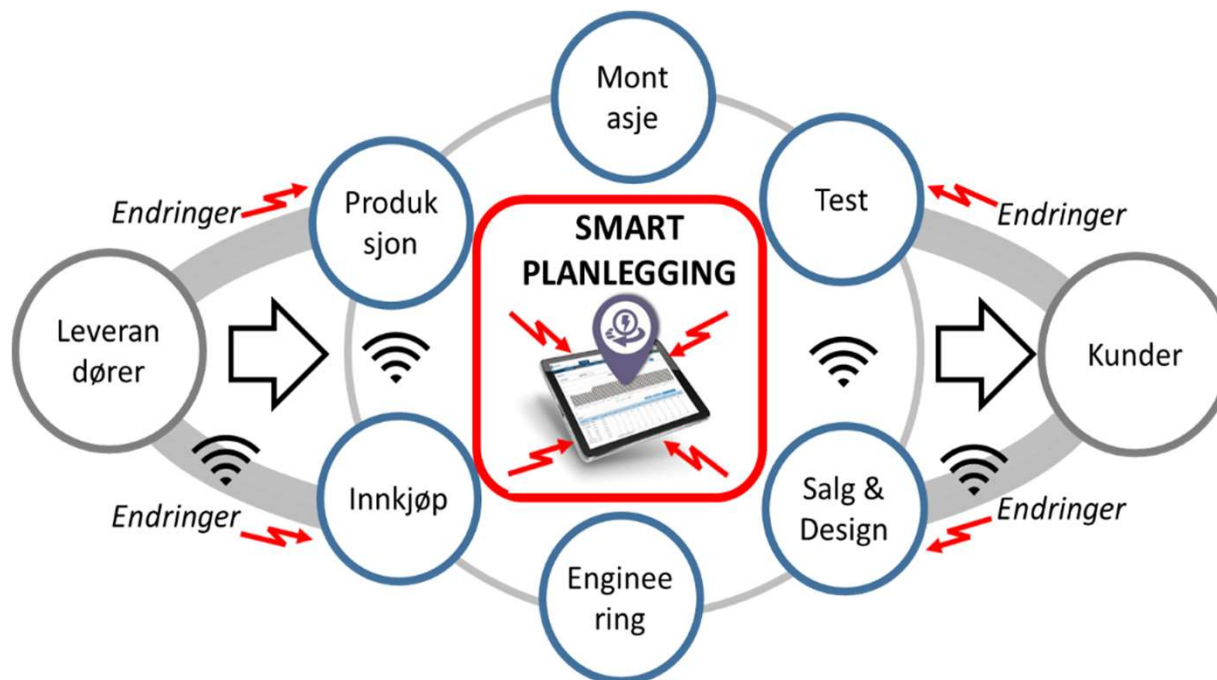
Assistive Tech for Picking

RESPONS A National Research Project

Developing **models, methods and tools** for **smart planning of changes** in an integrated value chain for production of advanced **ship equipment** based on data capture and **digitization**.

Project topics include:

- Value chain as a **digital shadow** of the production flow
- Assessing **consequences** of proposed changes based on experience data
- Support for handling **change orders** in the main **planning** process
- Information sharing, and collaboration on **change orders** in the **value chain**



	
	
Project Type: IPN	
Budget: 23 MNOK (11 MNOK fra Norges Forskningsråd)	
Project Period: 2018 - 2022	



Iris D. Tommelein

Distinguished Professor of Engineering and Project Management, in the Civil and Environmental Engineering Department, UC Berkeley



Ralph Riedel

Professor in Logistics, Zwickau University of Applied Science

Program

- 10:00 **Welcome and introduction**, *Erlend Alfnes (NTNU)*
- 10:15 **Takt planning for low volume production and construction**, *Iris D. Tommelein (UC Berkeley)*
- 11:15 **Effective low volume production at Brunvoll**, *Knut Ola Tverdal and Ragnar Olsvik Hovind (Brunvoll)*
- 11:45 **Planning low volume production**, *Erik Gran (SINTEF)*
- 12:00 Lunch
- 13:00 **Success factors for digitization in logistics**, *Ralph Riedel (Westfälische Hochschule Zwickau)*
- 13:45 **Sales & Operations Planning for Engineer-To-Order manufacturing**, *Swapnil Bhalla (NTNU)*
- 14:00 Coffee break
- 14:15 **Statistics-based analysis of project data for improved understanding of the effect of production methods and strategies on performance**, *Marco Semini (NTNU)*
- 14:30 **Using ERP systems for production planning in the smart factory**, *Odd Jøran Sagegg (Devoteam)*
- 14:45 **Customized mass production - how to Lean?** *Ola Lauve (Overhalla Hus)*
- 15:15 Closure