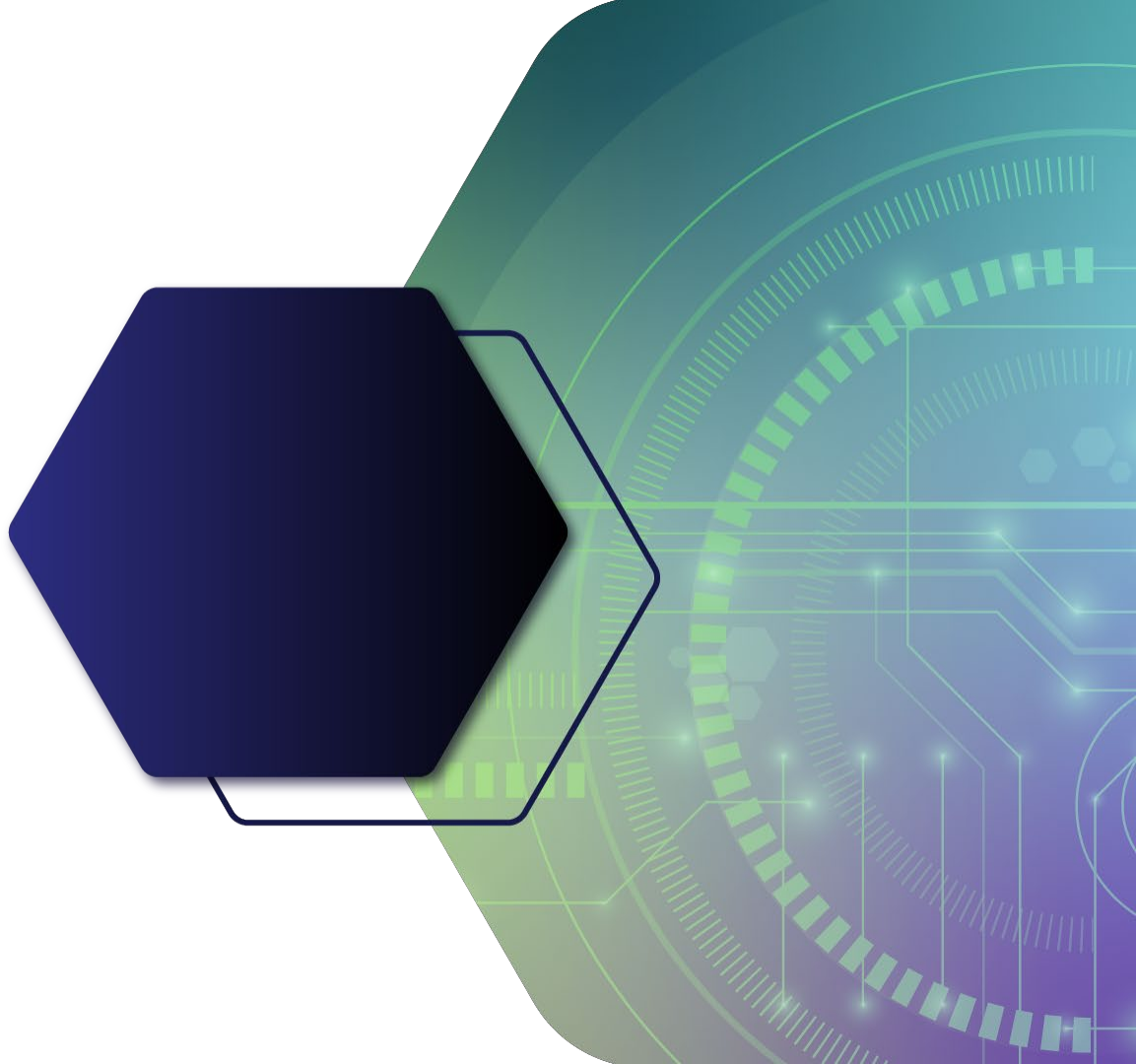


GENESIS





 **smart**
advanced manufacturing

ORGANISATION PROFILE

AIT Angewandte Informationstechnik Forschungsgesellschaft mbH – Austria

- Austrian software and R&D SME, founded in 1979
- Information-system, database & application engineering
- Declarative 4GL / C++ development and reusable software assets
- Edge/IoT and SBC-based deployment
- Collaborative national & international R&D since the 1990s
- **GENESIS:** coordination | ISF architecture | 4GL/C++ | integration
| MatCube

PROPOSAL INTRODUCTION (I)

Vision

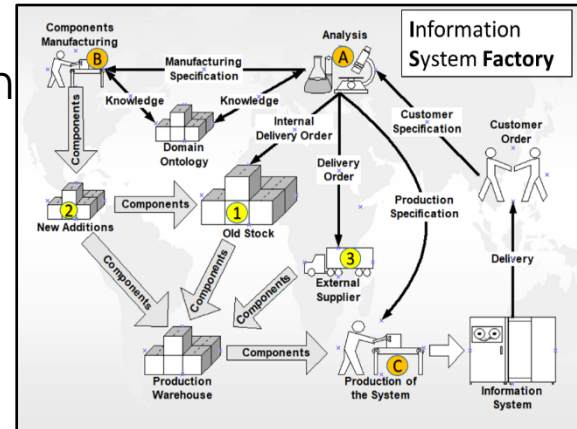
- Re-establish the Information System Factory (ISF)
- Information systems → products of a governed production process
- From handcrafted applications → industrialised IS production

Motivation (WHY NOW?)

- 1980s ISF vision → now technologically feasible
- Generative AI → interpretation & synthesis
- Mature toolchains → automated production
- Powerful SBCs → local/edge deployment

Content (GENESIS)

- RIA – Requirements Intelligence Agent
- GPA – Generative Production Agent
- VGG – Validation & Governance Gate
- 4GL / 3GL → Cloud | Edge | MatCub



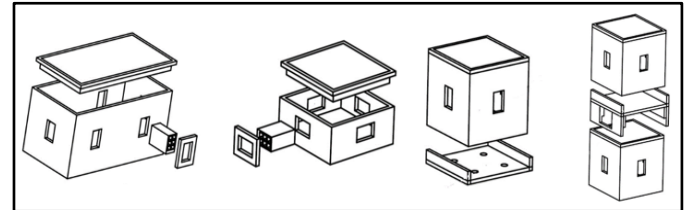
PROPOSAL INTRODUCTION (II)

Expected outcome (THE ISF MANUFACTURING PROCESS)

- Requirements → production specification
- Production stock → software | data | models | knowledge
- Production → select | compose | generate
- Quality control → validate | govern | approve
- Product → operational information system
- Deployment → Cloud | Edge | MatCube

Impacts (EXPECTED IMPACT)

- Handycrafting → continuous production
- Reuse instead of redevelopment
- Lower engineering & lifecycle effort
- Governed AI-supported production



PARTNERS

Current Consortium

- AIT – Coordinator | ISF | 4GL/C++ | integration | MatCube

PILOTS FOR VALIDATION

- Manufacturing / Industrial IoT
- Business Administration / ERP
- Healthcare
- Cultural Heritage

Partner search – contributions sought (PARTNERS SOUGHT)

- Pilot applications → domain expertise & validation
- AI Production → RIA | GPA | knowledge integration
- Quality Control → VGG | testing | governance
- Production Stock → software | data | models | documentation

CONTACT INFO

Contact info:

Walter Koch

Project Proposal Coordinator

AIT Angewandte Informationstechnik Forschungsgesellschaft
mbH

Graz, Austria

E-mail: kochw@ait.co.at

Web: ait.co.at

