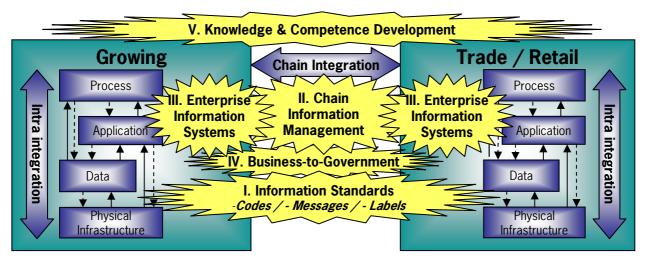


## ICT in Dutch Horticulture: State of the Art and Future Challenges

Cor Verdouw<sup>1\*</sup>, Sjaak Wolfert<sup>1 2</sup>, Adrie Beulens<sup>2</sup>, Peter Ravensbergen<sup>3</sup>



## Context

- *Objective:* to survey the State of the Art <sup>(2009)</sup> of Information & Communication Technology (ICT) in Dutch Horticulture, to identify remaining bottlenecks and to outline a co-innovation programme for working in a structural way on future challenges
- *Project participants:* Ministry of Agriculture, Nature and Food Quality (funding), Commodity Board for Horticulture, Innovation Council Flowers & Food, and the sector platforms Fruglcom, Florecom and Florilog

## Highlights State of the Art

- Dutch horticulture is *active* in ICT innovation
- Mainly *inter-enterprise* projects: insufficient intraenterprise integration is increasingly a bottleneck for chain integration
- Focus on *data exchange*: dynamic integration of software applications (e.g. Service-Oriented Architecture) is an emerging issue
- Operational perspective: lack of an integrated, strategic ICT approach

## Key Future Challenge: Coordination on ICT focus areas, within and between horticultural sectors (various vegetables and ornamentals), in close cooperation with governments and research/education

ICT Theme	Focus Areas	Investigated Projects
I. Information Standards	Standardisation of product / article codes; logistic information codes, electronic messages, standards for auto-identification (including RFID)	Datatuin, Sierteelt Internationaal Digitaal / Florecom XML,Frugicom, Linneaus, Codering Levend Groen, Locatiecoderingen Sierteelt
II. Chain Information Management	Integration of enterprise systems among chain actors; logistic and quality Tracking & Tracing; Auto-identification in supply chain (including RFID); Chain Business Intelligence	KISSit, RSLM, Digitale Slotplaat, Bl Sierteeltketen, Van plant tot klant, Versschakel, KIS FresQ, EWRS Food Compass, KwaliTenT
III. Enterprise Information Systems	Enterprise Resource Planning (ERP); Integration Enterprise and Nursery Information (ERP and mechanisation); Enterprise Business Intelligence	Plantform
IV. Business-to- Government	Information exchange among companies and governments	Client, Horizontaal Toezicht, SALDO, LNV 100% Digitaal



<sup>1</sup> LEI, part of Wageningen UR, The Hague, The Netherlands

<sup>2</sup> Wageningen University, Logistics, Decision and Information Sciences, The Netherlands <sup>3</sup> Commodity Board for Horticulture, Zoetermeer, The Netherlands

\* cor.verdouw@wur.nl; Tel. +31 317 4 84752; www.lei.wur.nl

Reference

Verloop et al. *Tuinbouw Integraal Digitaal (TID);* Inventarisatie, analyse en programmavoorstel. LEI report 2009-098. www.lei.dlo.nl/publicaties/PDF/2009/2009-098.pdf