dawin
MOBILE VOICE INPUT
FOR THE INDUSTRY
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Sébastien Bratières spearheads quint, the newly established voice division at dawin gmbh.
WAREHOUSE 
LOGISTICS
• task: picking, inventory, replenishment, goods reception
• hardware: ruggedized PDA, low-end
  • low-margin, high-volume: 5y turnover for devices
  • standard OS Windows Mobile
• voice aspects: immigrated workforce, non-native accents
voice advantage:
- other options impractical: deep freeze warehouse, need hands-free
- time savings on highly repetitive actions (>1000 x/d)

voice tightly adjusted to business process and WMS integration
CORPORATE MAIL SORTING
• task: sort incoming mail to pigeonholes
  • when automated solution not feasible: medium-sized mail room, parcels, incomplete address
  • repetitive = name lookup on list
• hardware: desktop-based, DECT or BT headsets
• voice aspects: recognize from very long list of person names (>10k)
• initially users wish screen display, later voice only
LAB/GREENHOUSE TESTS
• task: in greenhouse, assess health status of plants treated with fertilizer, insecticides
• hardware: laptop, DECT headsets
• voice advantage: gloves worn => two persons needed for data input
• IT context:
  • input to Excel sheet! post-processing based on sheet
  • other project: voice-driven Intranet
• agri-food use cases
  • slaughterhouse carcasses inspection: gloved, repetitive operation
  • organic certification, operators may be illiterate
INSPECTION AND MAINTENANCE
• task: machine inspection, checklist-based
• hardware: smartphone, wired headset
• solution aspects
  • multimodal input: mostly voice for checks, also pen-based sketch/photo/audio recording/signature/GPS location
  • freeform text fields for comments
OUTLOOK
• challenges for existing technology
  • non-native accents
  • customized dictation models for business-specific language
  • excellent noise robustness, esp. background speech
  • distinguish speech addressee
  • very low latency and error rate
  • ruggedized headsets
• many verticals, in common: qualified manual processes
• voice interface assists process
• new generation of devices
• market no longer reduced to logistics: new technology opens new use cases by the day
THANK YOU!