



Live with confidence

AAL Forum Session A-5: IPR



Stephen Von Rump CEO, Giraff Technologies, Sweden

> September 10, 2014 Bucharest



Giraff overview

- Founded in 2009 in Västerås, Sweden
- Markets Giraff mobile telepresence service
 - 2014 revenue: \$642K (EU-based, core business)
 - Over 130 systems delivered
- Well-known AAL solution in EU
 - Former winner of AAL "Most Promising Innovation" award
 - One of Sweden's "Top 20 Innovations"
 - One of Information Week's "Top 10 robots that could change healthcare"
- International research validation in dementia care
 - ISTC working with MCI patients in Italy as part of ExCITE
 - EU Assistive Technology Initiative RemoDem in UK
 - Dementia Collaborative Research Centre in Australia
 Griffith University in Brisbane















SI.

Currently marketing the Giraff AAL system

Next- generation evolution of telehealth

- Creates an intensive care environment in the home
- Integrates environmental sensors, actuators and biometric devices
- Network of care, clinical and ADL protocols
- Standards-based, plug-and-play, adaptable to many care scenarios
- Provides "instant caregiver presence" via Giraff avatar
 - Response to urgent situations via Internet with full mobility, day or night
 - Empowers elderly residents and their family to help manage themselves, ask for help when needed
 - Family and health care professionals can supervise health care protocols, chronic conditions, early dementia; check in, provide social interaction
- Al component provides insight into home and person
 - And dynamically customizes UIs for each caregiver
- Supports protocols for many different care scenarios





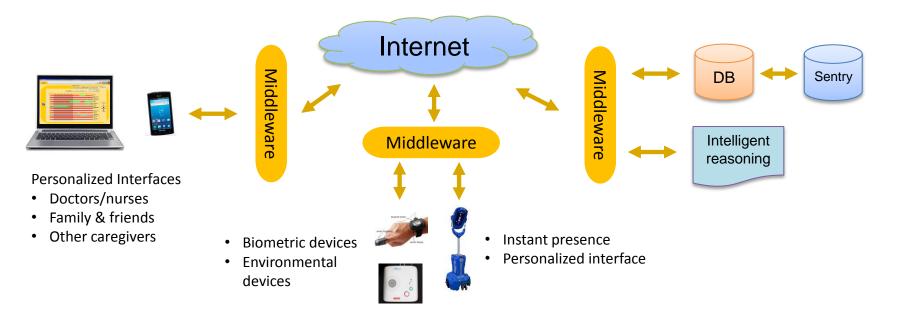






Giraff AAL platform architecture

- A complex, development-intensive platform
 - Presenting many IP opportunities
 - That Giraff benefits greatly from
 - And is happy to share in the rewards





Giraff EC project experience

- *ExCITE* Enabling Social Interaction Through Embodiment
 - Evaluate user requirements of social interaction through mobile telepresence
 - AAL Joint Programme Call 2, 2010-2013
- GiraffPlus
 - Develop telehealth architecture that evolves with elderly's needs
 - FP7 ICT Challenge 5: ICT for Health, Ageing Well, Inclusion and Governance, 2012-2014
- VictoryaHome
 - Develop tools for a care network around independent life at home
 - AAL Joint Programme Call 5, 2013-2016
- ► TERESA
 - Develop a socially intelligent remote telepresence device for home care
 - FP7 ICT-10-2.1, 2013-2016

Waiting on outcome of numerous Horizon 2020 proposals

5





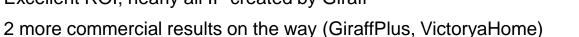






Giraff IPR perspective

- All 4 Consortium Agreements (CA) contain standard text on IPR
 - Standard foreground and background clauses
 - Some "inclusive" and some "exclusive"
 - Giraff carries much background into projects
 - And Giraff has been the technical focal point of all projects
- 1 commercial result (ExCITE)
 - Excellent ROI; nearly all IP created by Giraff



- CEO has managed patent portfolios in several U.S. companies
- Generated IPR has both academic and commercial relevance
 - Academic focus worthiness, novelty, "CV" motivated, theoretical
 - Commercial focus market, competitive barrier, financial, practical
 - SMEs obviously care about the latter







IPR barriers and complexities

- Overall, Giraff projects have had "smooth sailing"
 - No major debates over background rights
 - No major debates over foreground ownership
 - No license agreement issues
 - No overall CA issues
- ► The "M x N" problem



- M consortium members all (claim to) contribute to N IP components
- Therefore M x N license agreements are required to commercialize
- Also, some consortium members believe that consortium owns IP, not individual members
- M x N is a non-starter for nearly any venture capitalist



Resolving the challenges

- The M x N problem
 - No magic to resolution
 - Appeal to common sense and business judgment
 - Otherwise, King Solomon will simply "split the baby"
- General recommendations "if I could do it again"
 - Conduct an IP tutorial at beginning of project
 - Specifically set expectations regarding joint ownership
 - Think carefully about "inclusive" vs. "exclusive" definition of background
 - Make license agreements as simple as possible re: exclusivity, geography and market reach





Reconciling open innovation with IP management

- A difficult issue for any SME
 - More open source = less need for license agreements
 - But also = fewer competitive barrier opportunities
 - Although in practice, real barrier is integration, market knowledge
- Giraff guidance don't try to guide it
 - Let each consortium member follow their own philosophy
 - Much driven by practical issues anyway (e.g. building on other open source)
 - Academic and business entities have different interests
 - Going against those interests creates unnecessary conflict
 - Try to neither encourage or discourage open innovation
- Simply deal with the resulting IP landscape in the context of what is needed to commercialize
 - Focus on what matters not license agreements for their own sake, but for a commercial purpose





open source

Support actions and tools

- In general (IMHO) CA support from EC is good
 - The CA structure works well
 - Allows for clear separation of background and foreground
 - Provides guidelines for ownership and transfer



- But does not try to dictate future IP agreements simply says that there should be such
- European Economic Interest Group (EEIG)
 - May work for certain complex alliances
 - Or where a strategic investor is involved
 - But venture capitalists invest in companies and teams, not consortia
- Guidance on dealing with the "many pieces" problem
 - Individual IP components are public domain
 - And yet there is novelty and license/patent opportunity in the integration of the pieces









Live with confidence

AAL Forum Session A-5: IPR



Stephen Von Rump CEO, Giraff Technologies, Sweden

> September 10, 2014 Bucharest

