

New way to create and consume
m-health services
*Making the self-serve society
a reality*

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5-7 October 2011

What is “AAL”?

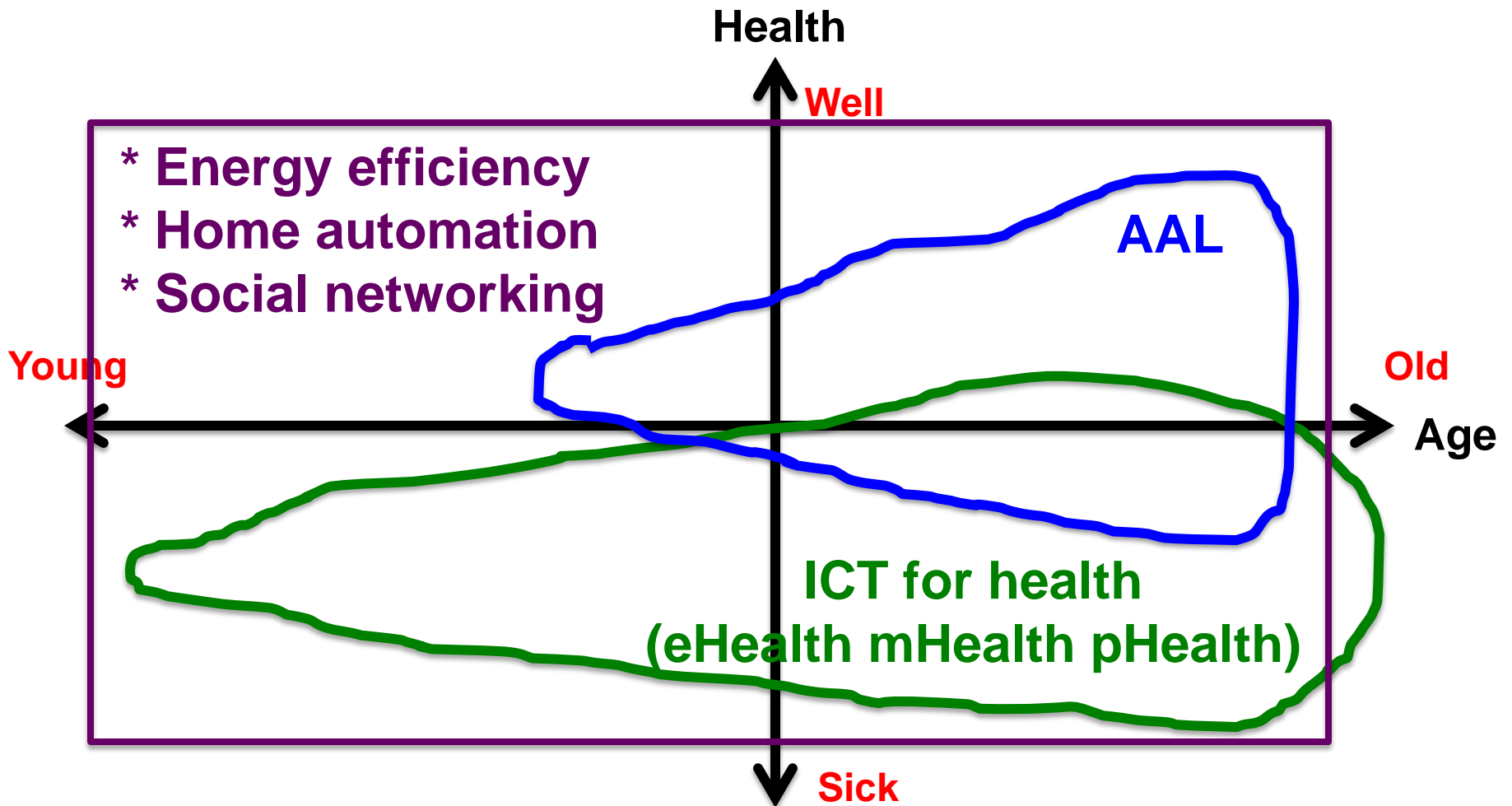
Assisted Living

A

- AAL refers to ICT solutions that will help elderly individuals to improve their quality of life, stay healthier, live independently for longer. It involves many ICT-related R&D disciplines in an application field that has attracted much attention.

ICT for ageing well

AAL/the self-serve society: not to be viewed in isolation



Numerous regional sites involved in ICT Ageing & eAccessibility Pilots

But what do the providers of AAL services experience in practice?



Success AAL Applications

- Why does an AAL Application success?
- An application that:
 - Natural interaction: voice based.
 - Invisible technology: wearable, wireless
 - Distributed devices
 - Personalized

Problems ... and possible solutions

User acceptance and/or uptake problems

Technical / cost problems

No place for users to advertise their needs

Users could not find existing services

Users skeptical

Users needs not met

Too much one-off development, too little reuse

Diversity of devices

Inter-operability problems

1. Functioning AAL service marketplace

3. Fully representative AAL community

2. "Standard" AAL development platform

*Getting services to their
users:*

Facilitating the AAL Market

1. Functioning AAL
service
marketplace

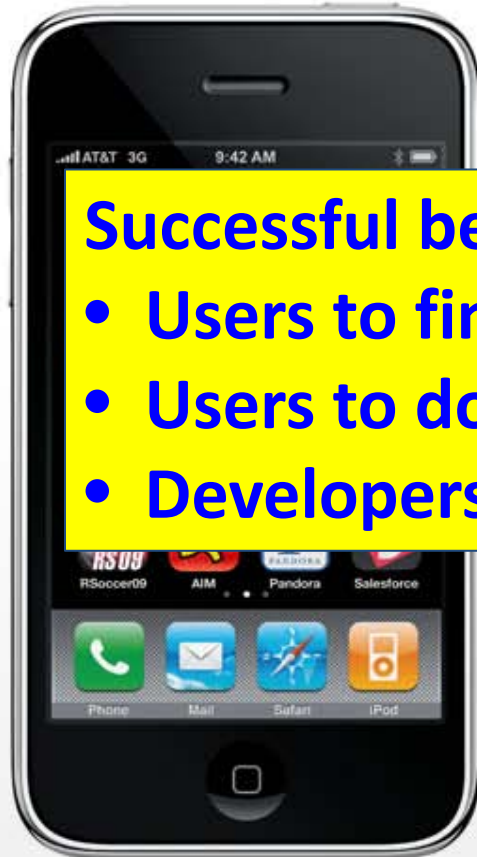
The AAL Marketplace: *How do service providers & users meet?*



Another example: App Store

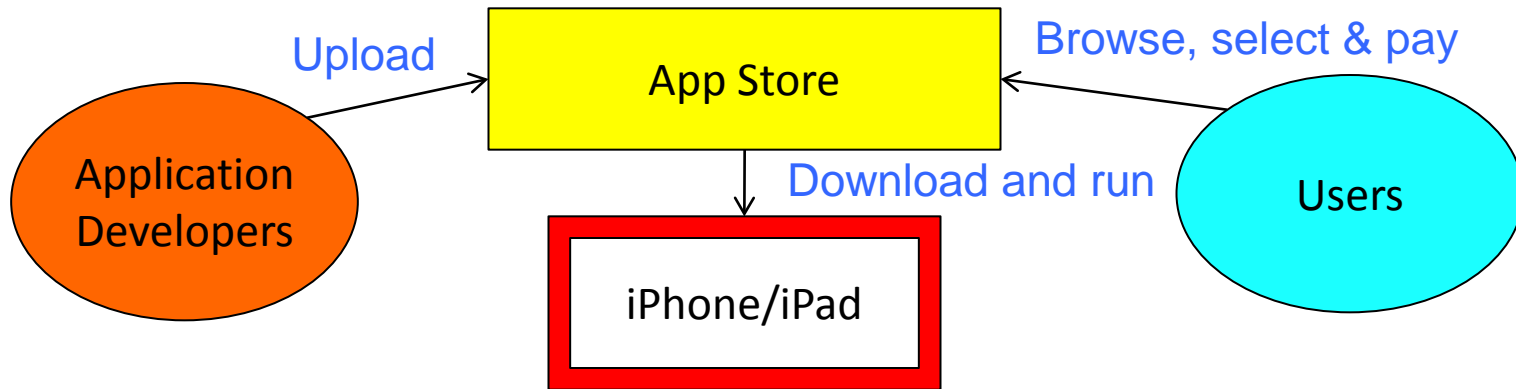
Successful because it is easy for:

- **Users to find applications**
- **Users to download, install and pay for apps**
- **Developers to sell through a single channel**



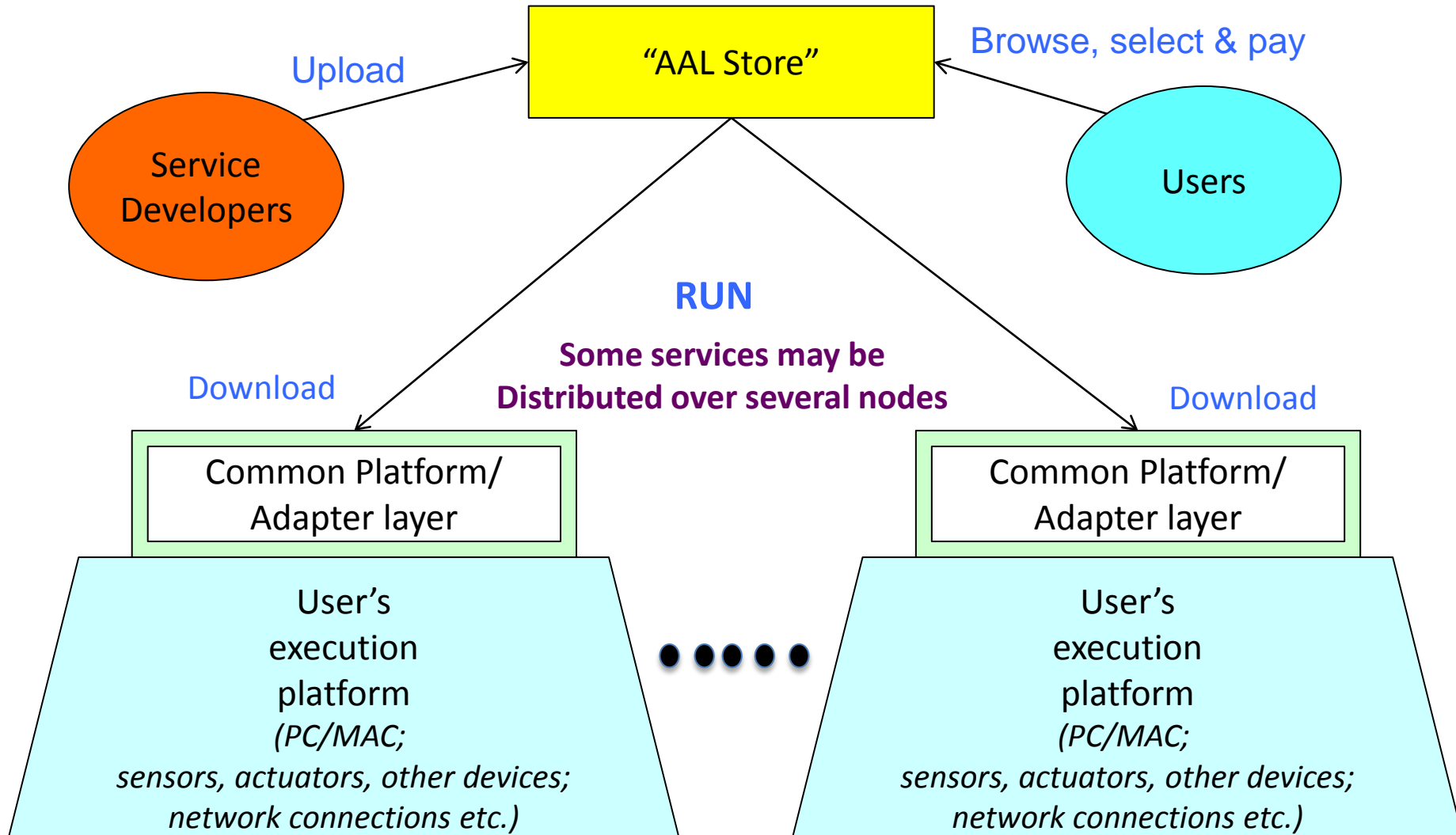
iPhone3G

Apples App Store concept



Proprietary platform

“App Store” for AAL?



Helping the developers:

**ALL Platform providing a
common, “standard” approach
to development**

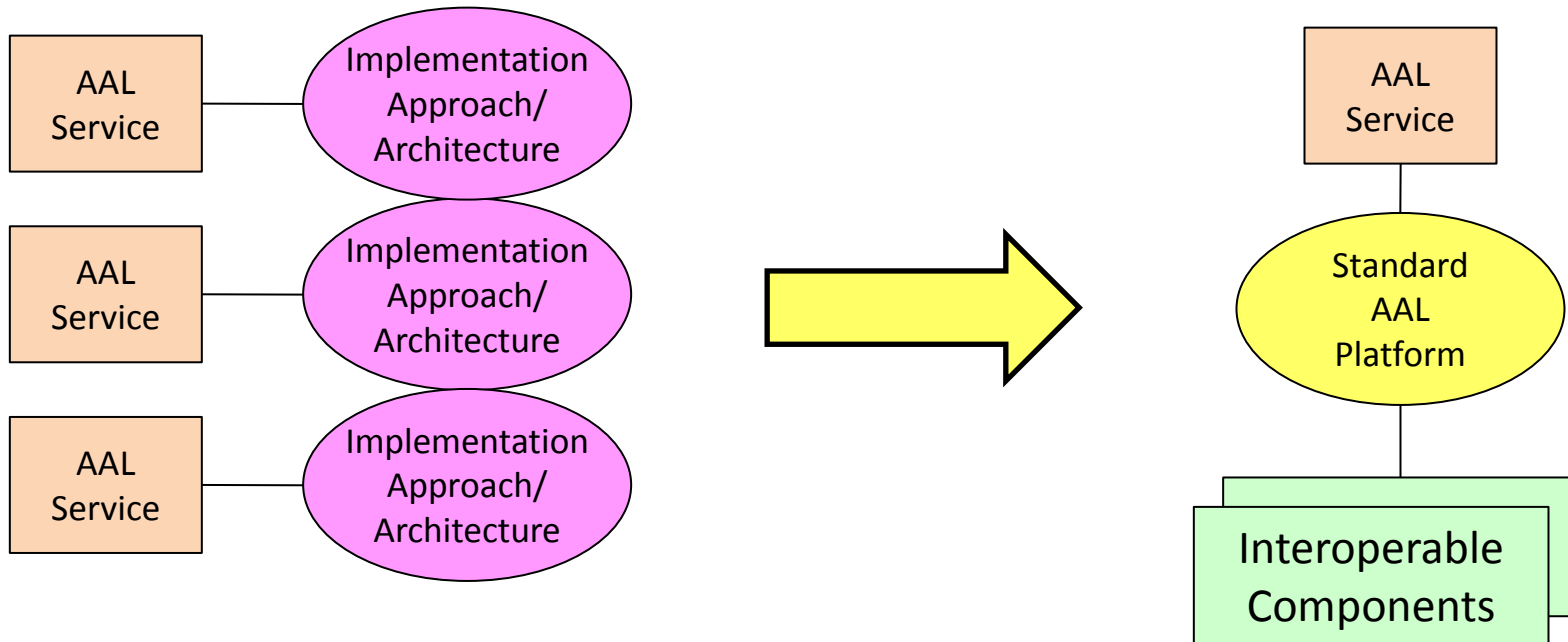
“Standard” AAL
3. development
platform

AAL Platform: Fiction or Feasible?



What is made possible by a platform?

- ❑ Instead of each AAL service being built from scratch for specific needs – establish a single “standard” way to build AAL applications
- ❑ Make it easy for different vendors to create & sell different **components** that can be incorporated in multiple AAL services



universAAL Main Objectives

“To make it technically possible and economically feasible to design and deploy innovative AAL services”

- Providing an **open and scalable technological platform** that facilitates the development and deployment of a broad range of AAL services
- Carrying out support activities promoting **widespread acceptance and adoption** of the platform.

“Platform” – for whom?



Primary Users =
(Service/application developers)

End-Users
(Elderly, family members, care givers, ...)

Primary Users



**Software architects/
developers**

Working for companies producing
complete AAL solutions

Working for companies producing AAL
components

Working alone, open source
community

Device
Manufacturers

Users of uAAL:

End-user



- Elderly
- Family members
- Carers
- Medical staff
- Local authorities responsible for care
- Companies providing care

Primary users: Software architects/ developers



- Software architects
- Developers

Working for companies producing **complete** AAL solutions

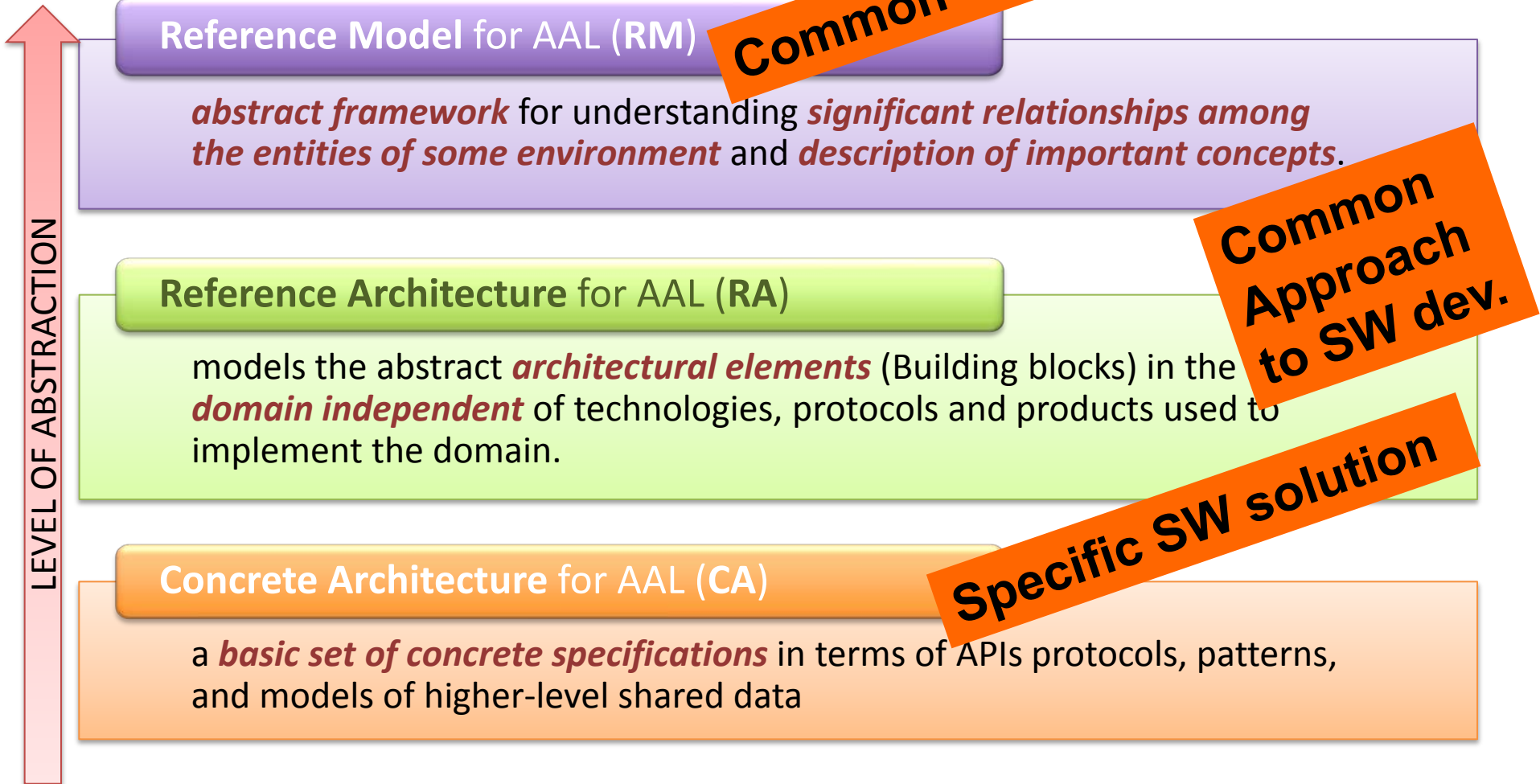
Working for companies producing AAL **components**

Working alone, open source community

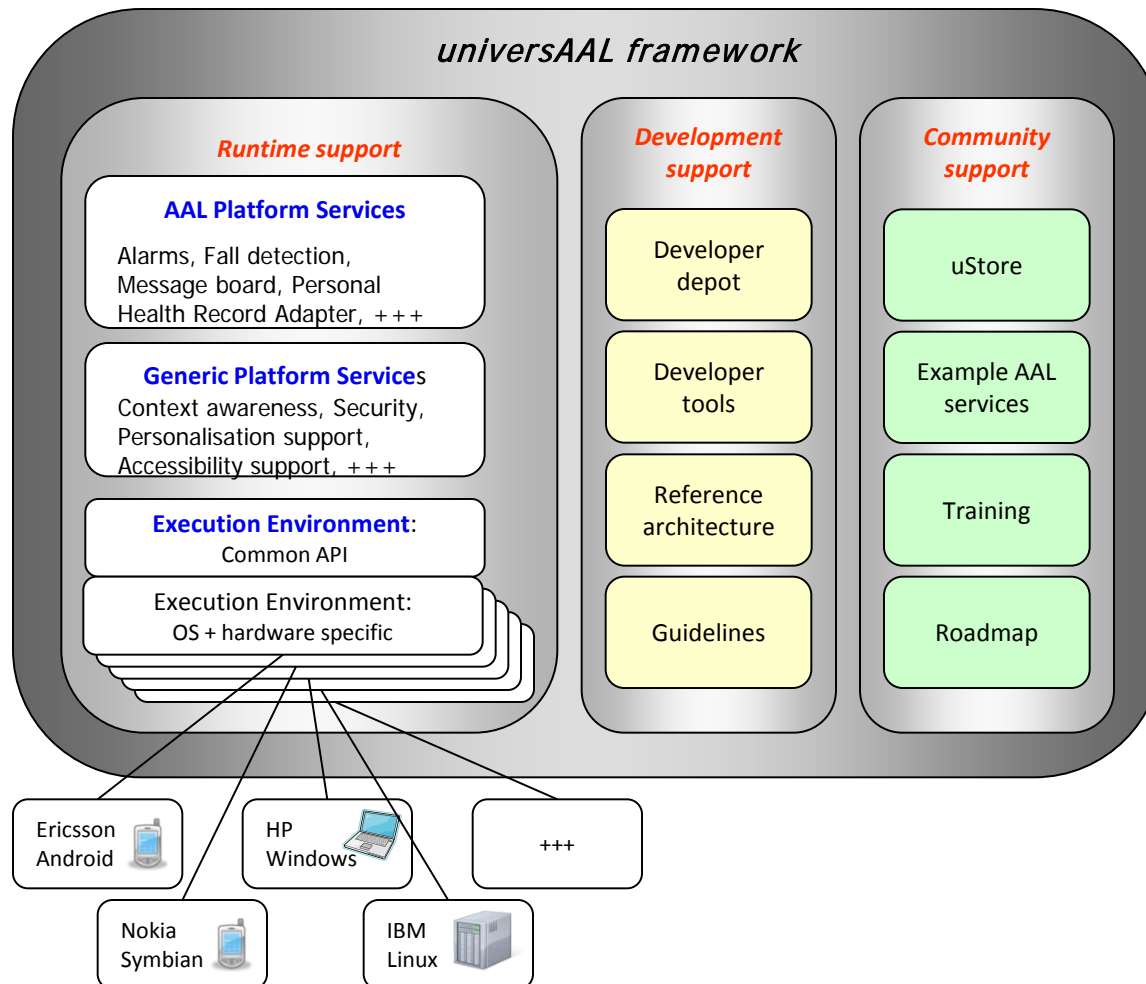
Device
Manufacturers

Our work is aimed mostly – but not exclusively – at these primary users

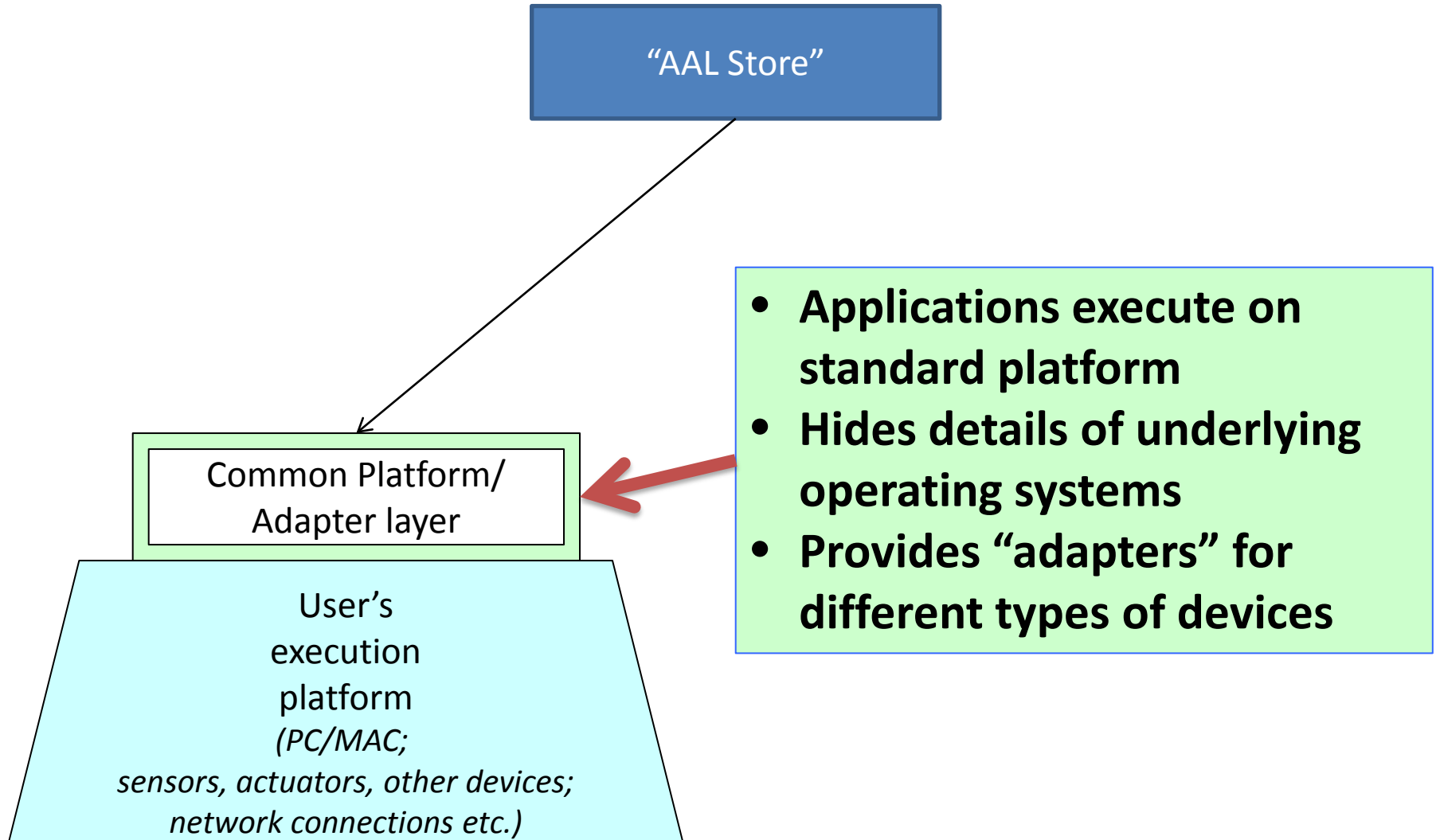
Platform (1): A Reference Model/Architecture



Design Objectives/ uAAL Platform



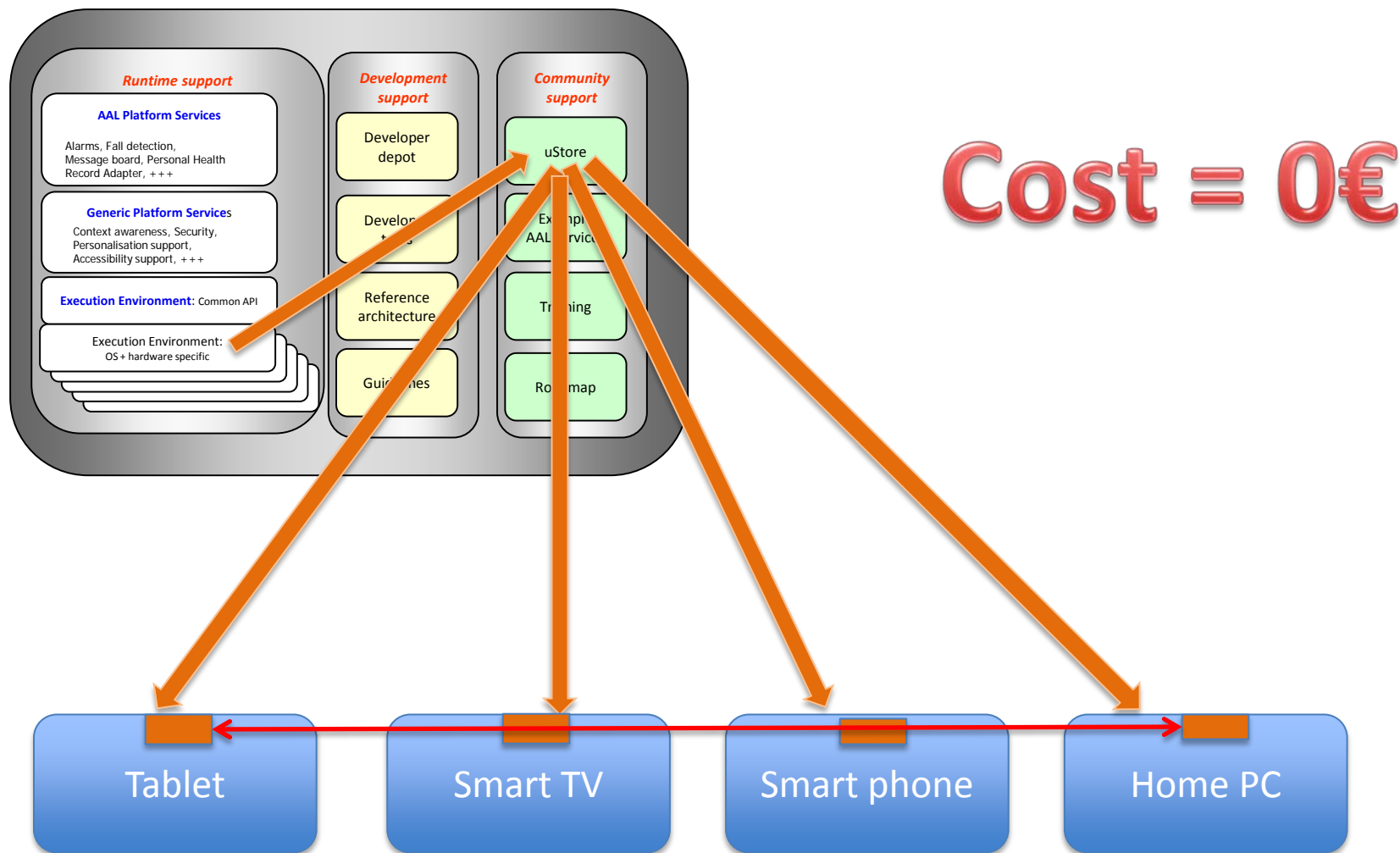
Platform (2): Run-time support



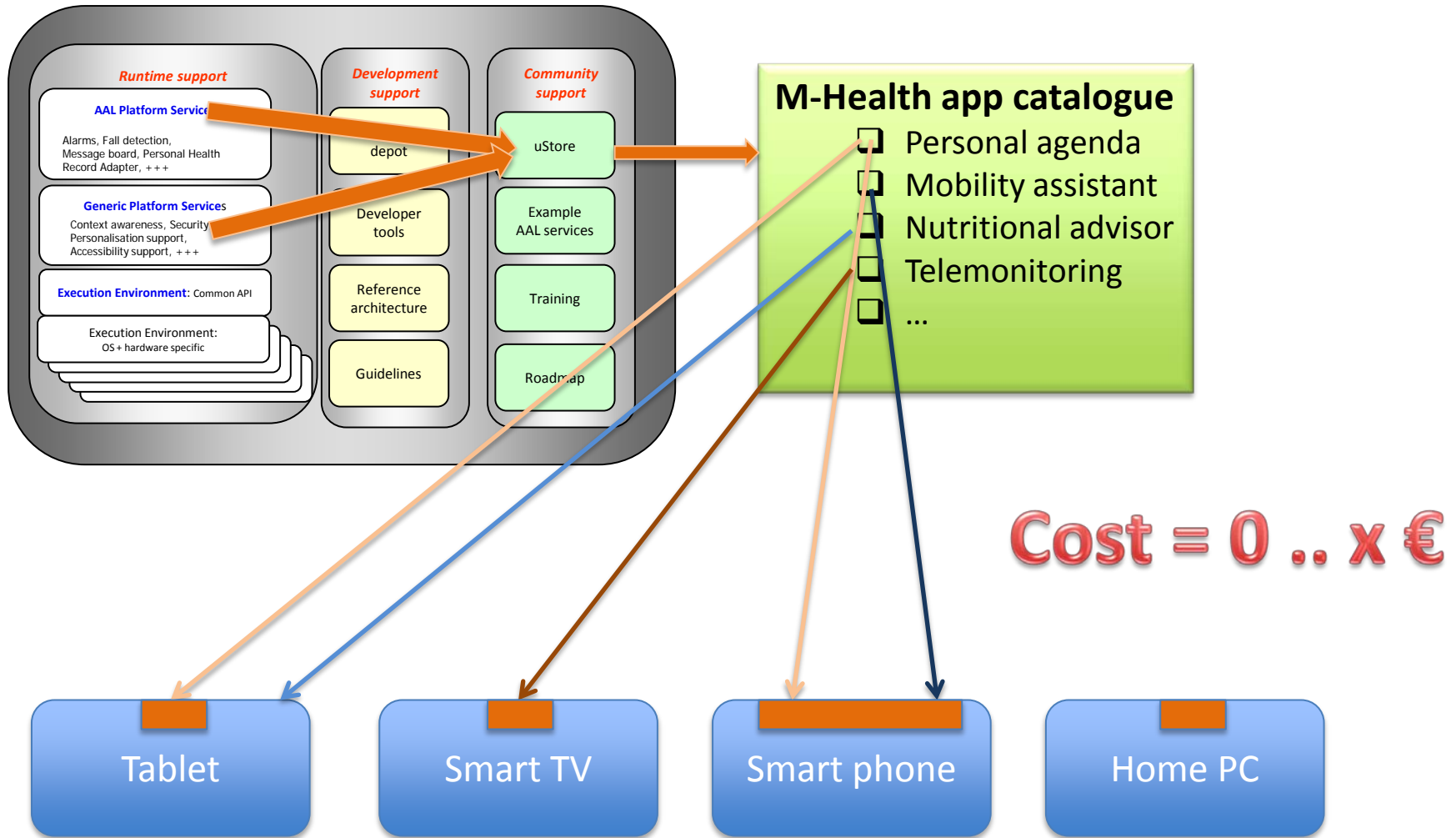
How the system works: Innovative AAL Services

The use case of Health
Management Assistant

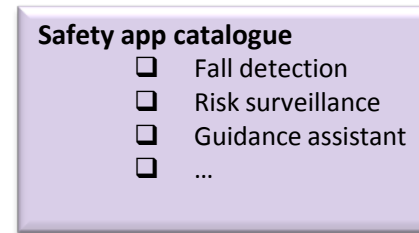
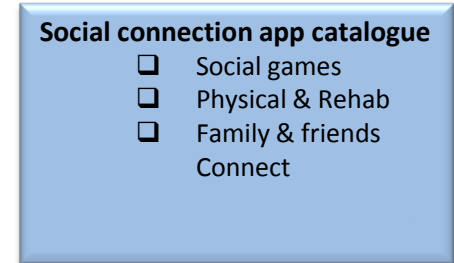
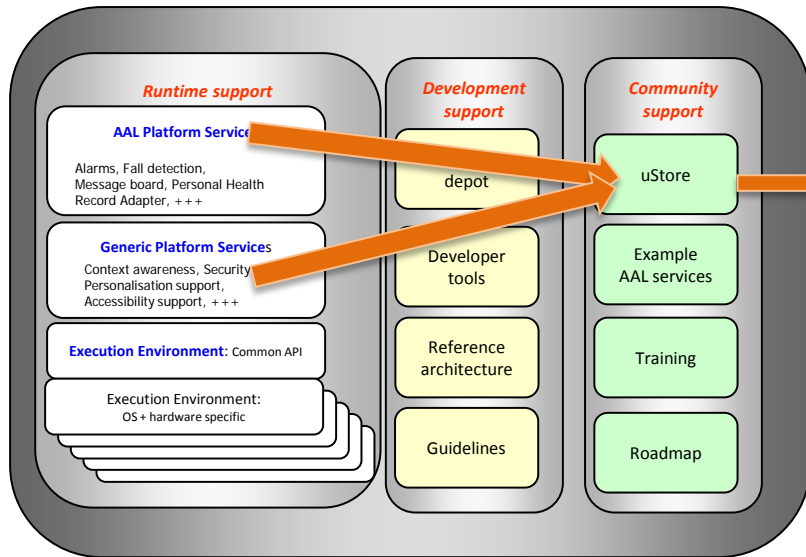
1º: download the execution environment



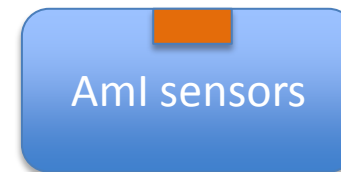
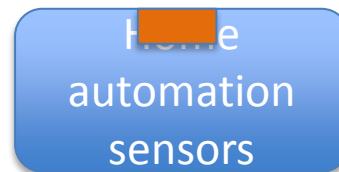
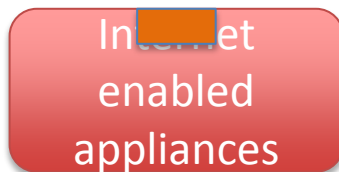
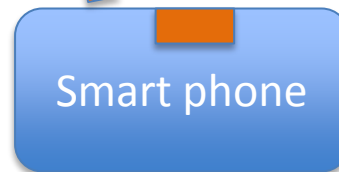
2º: download your needed m-health app



3^o: download more apps



Cost = 0 .. x €



Bringing everyone together:

Establishing an AAL Community

2. Fully representative
AAL community

A common platform is only useful if most people agree to use it



Makes no sense to live on “islands”



End-Users

(elderly, family, Informal carers, professional carers, funding authorities)

Explain what they really need

Be reassured that technology is “safe”

Provide services according to real needs

Develop reusable components



Industry/Service Providers



Open Source Contributors



Researchers

Define research agenda matching real needs

Need Single “Community”

Develop an AAL platform

Work in progress ...



The AALOA Manifesto

Version 0.12



AAL (Ambient Assisted Living) has great potential for positively influencing the lives of many people. But impact so far has been less than hoped, partly due to fragmentation of research efforts and the lack of a standardised approach for developers. To address this, we are forming the AALOA (AAL Open Association), and invite you to join in our efforts.

AAL - promising but problematic

The abbreviation "AAL" stands for Ambient Assisted Living¹ and is about making smart use of technology to support well-being in the preferred living environment for people who might otherwise find this difficult (e.g. infirm or very elderly people who want to continue motivated by socio-political issues of the ageing population, and offers a promising approach with

From a market perspective, there are two obstacles. The first arises from the lack of technical convergence: this leads to development of very different technical solutions that are difficult to compare, so there is no baseline against which to assess user experiences in the types of scenarios envisaged by Aml. It's hard to market something whose benefits you can't clearly fragmentation. The whole concept of "ambient" is all about making use of everything around you as part

*Establish
Community:*

www.aalooa.org



FP7 IP, 2010-2014

*Develop platform,
AAL marketplace:*

www.universaal.org