

## ■ The architect's role in real life

*The A team.*

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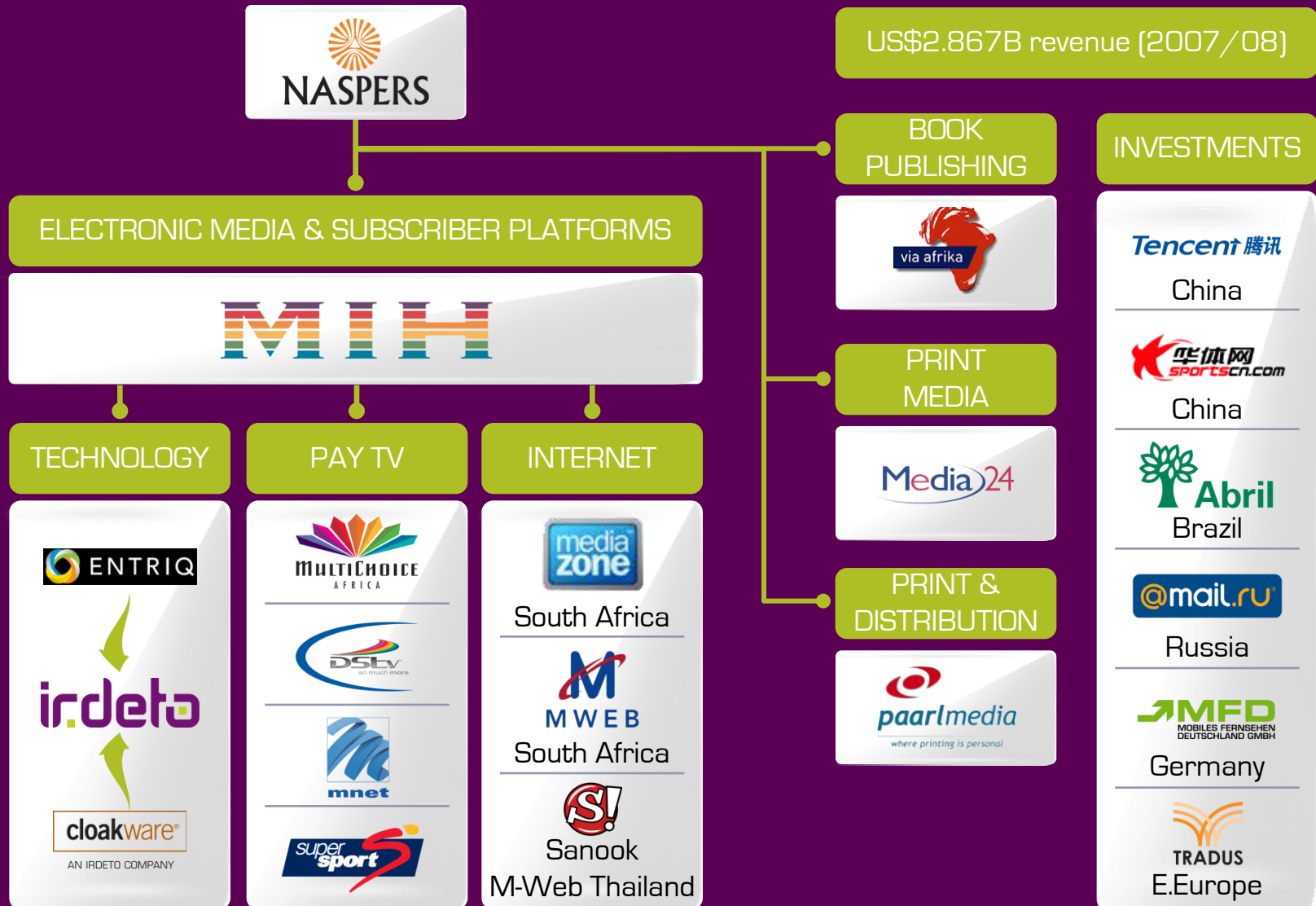
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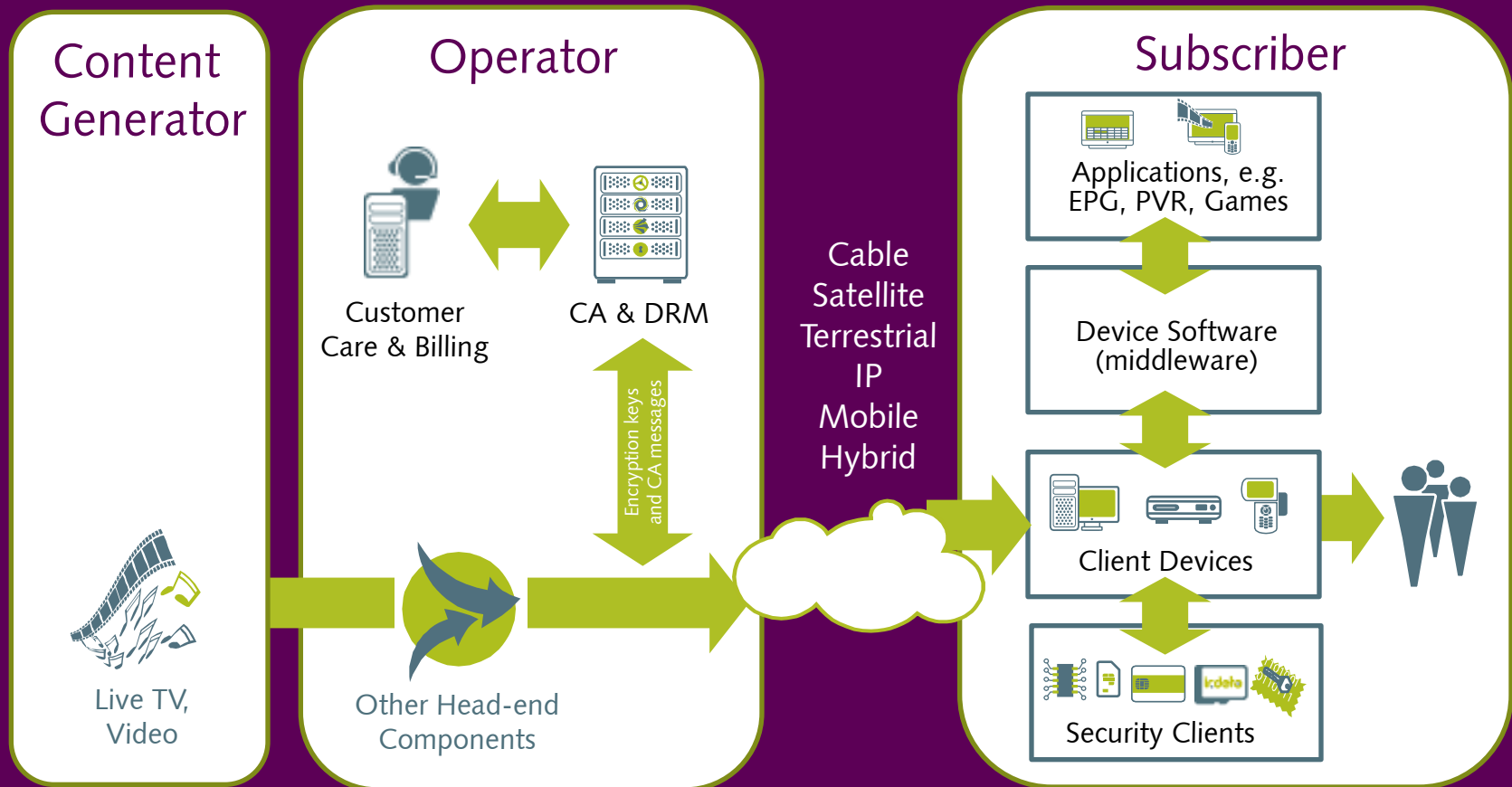


- Today's message
- Who is Irdeto, what do we do
  - Example of a typical Irdeto system
  - Irdeto's next challenge
- Some experiences
- Processes
- The Product Life Cycle (PLC)
- The role of the A Team in the PLC

- The system architect is not the guy in the ivory tower that knows it all.
- He needs to be a team player.
  - Development team
  - Project team
  - etc
- There is one small team that is core in every business that develops and delivers systems of some complexity.
- This team consists of;
- The product manager and system architect *The A team*
- Let me explain, by having a look at Irdeto and its systems first



Irdeto develops high end systems which purpose it is to protect content and manage delivery of content to paying customers





**DTH Africa**  
**Dual View, PVR, Push VOD**



**DTH Thailand**  
**PVR, Push VOD**



**DTH Turkey**  
**PVR, Push VOD**



**DTH Indonesia**  
**Low cost market**



**DTH Australia**  
**PVR, Push VOD**



**DTH Australia**



**IP Satellite**  
**High Definition Push VOD**

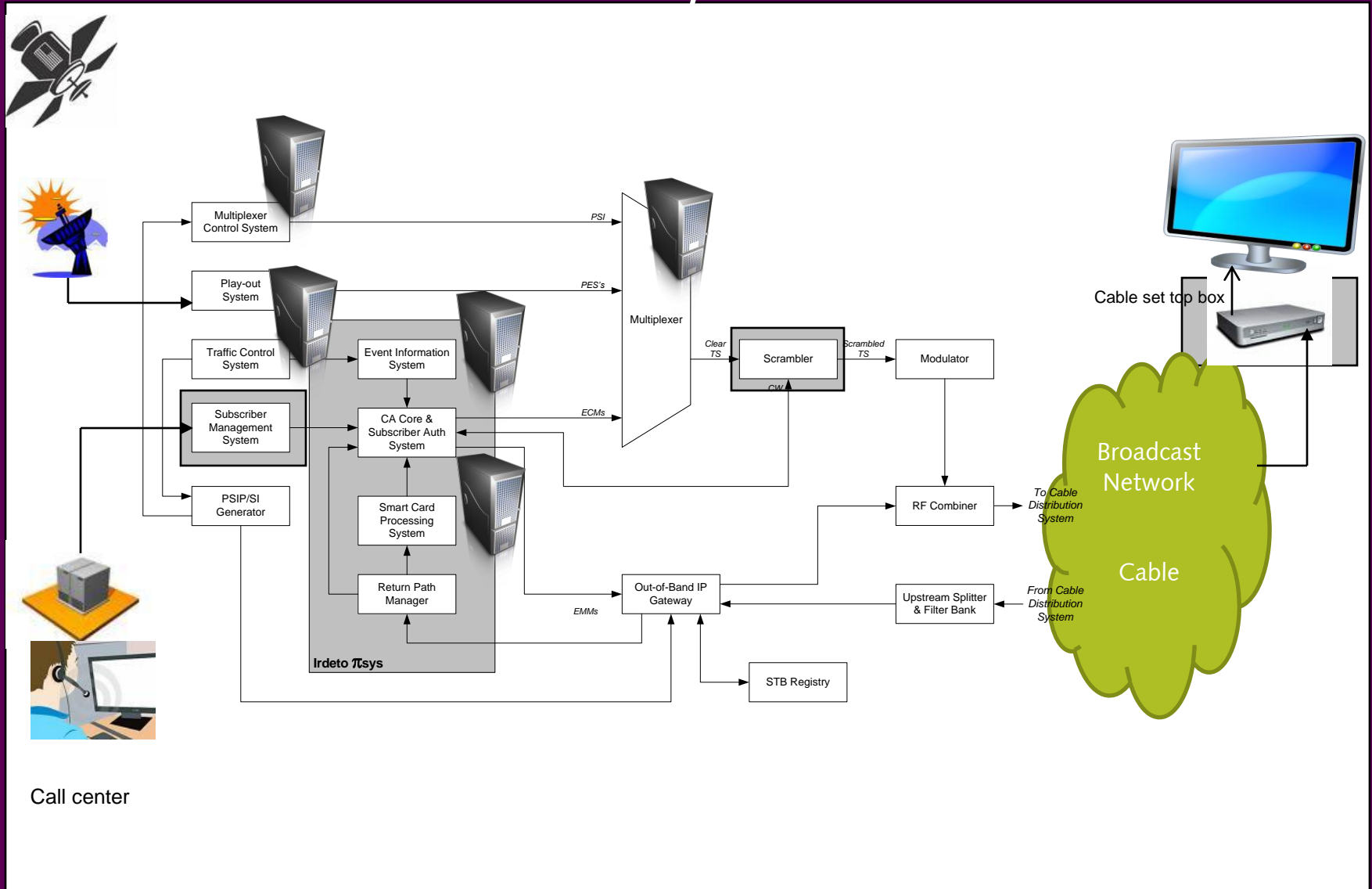


**DTH UAE**  
**PVR**



**DTT Italy**  
**Pre Pay**

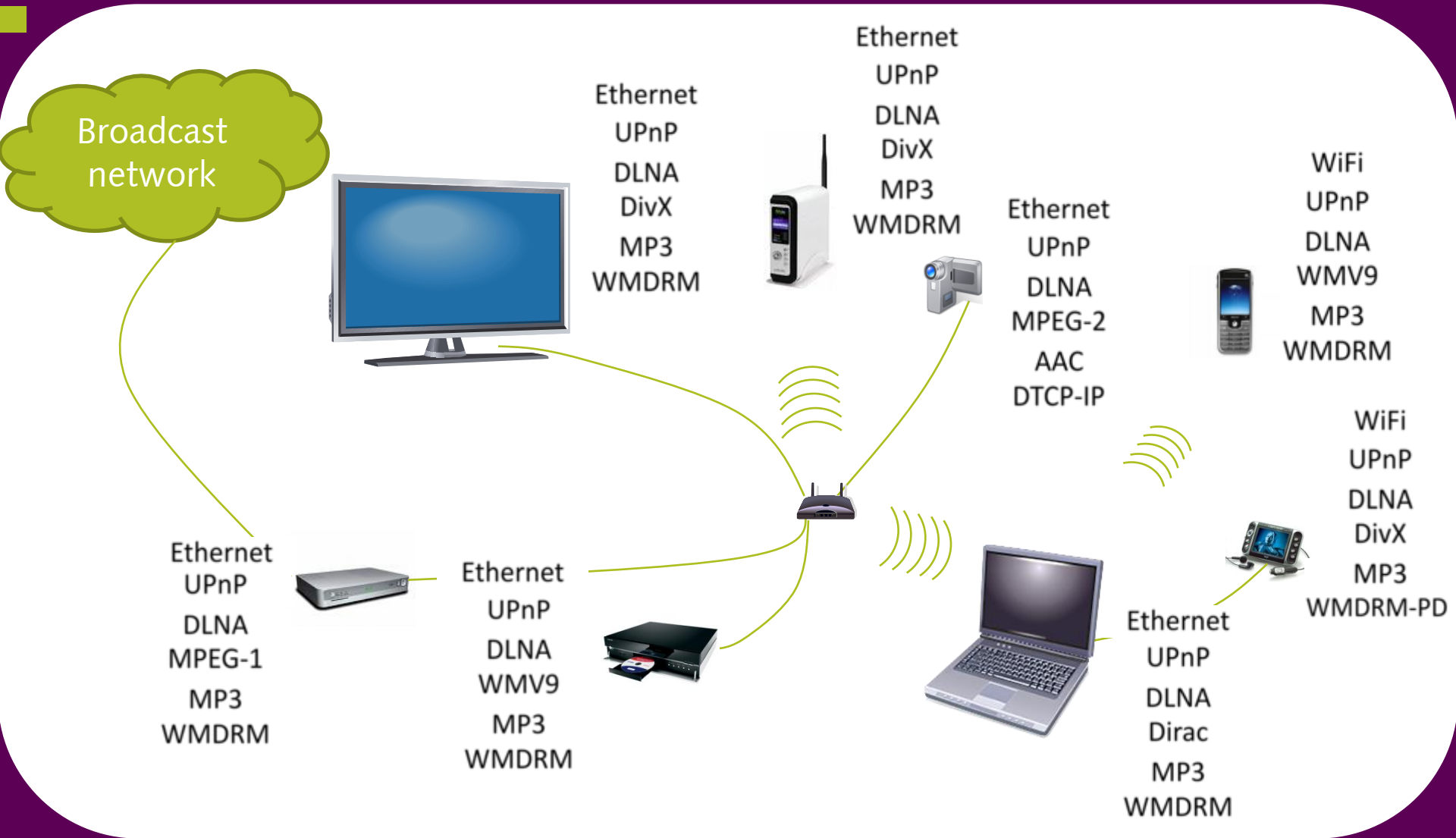
# Simple view of conditional access system and environment




- Setting up a digital cable network and head end system is complex but it works even with equipment of more than 15 different vendors.
- Why?
- Mainly due to standardisation. In this case IP and Digital Video Broadcast (DVB) standards.
- DVB is a standardisation group which has over 250 companies as members.
  
- It is organised by having a steering board and two major modules or working groups,
  - The commercial module and the technical module.
  - Typical members are product managers and system architects
  
- Here we see a first example of what I today call the A-Team.

- Call in the A-Team
- Problem: in-home networking
  
- Lacks single standard
  - Digital Rights Management (DRM)
  - Content encoding and formats
  - Device communication
  - Etc
  
- Next slide gives a taste of the standards jungle

# And which choice to make in the home?



- Clear need for a solution
- Can not be solved by sales, development nor by management.
- Nice task for the system architects and product managers.
- What does the end-user need? Want?
- How do we make it work, what are the right technical choices? What is the right architecture?
- What products and solutions could we derive and could be sold?

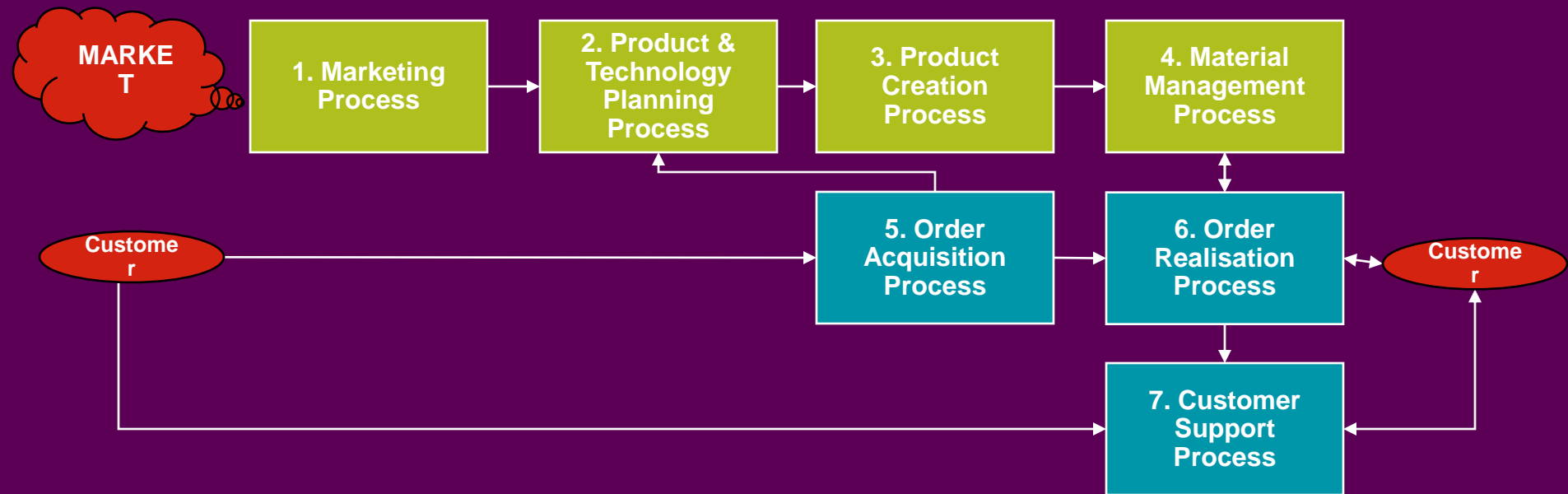
- We have seen a complex system that works based on the collaboration of teams that consist of product managers and system architects.
  - We have seen a complex problem that clearly needs attention of the SA and PM
  - So if you want to develop and deliver interesting products you need to get organized.
- 

- Create well-defined roles, job descriptions
  - Most importantly system architect and product manager
- Have a good process description based on the business process.
- Have a well-described Product Life Cycle (PLC) containing a good overview of all project documents that need to be created.

- What I have often seen go wrong
  - Many startups start with a bright idea but have neither specifications, product management nor processes in place.
  - There is an architecture, but it is not future-proof.
  - Process definition is fine when company grows? So let's wait.
  - Process is fine to get ISO certificate. But not work accordingly.
  - Process based on departments instead of business process. Each department is the center of the business.
  - The role of product manager does not exist or it is just the technical guy joining the sales guy.
  - Product managers are seldom empowered for Profit&Loss.
  - So there is a need for a well-defined task description, process and product life cycle management

## 8 Management Processes

- The Clock
- Strategy Review
- Budgeting

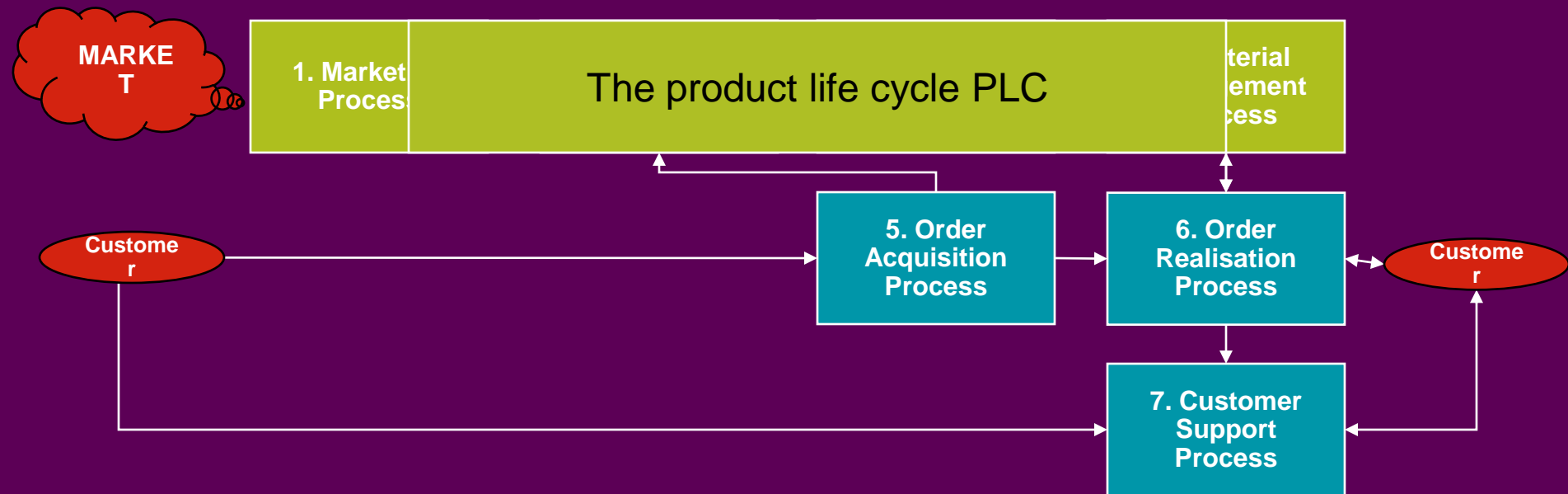


## 9 Supporting Processes

- HRM
- Controlling
- IT
- Marcom
- Supplier Base Management

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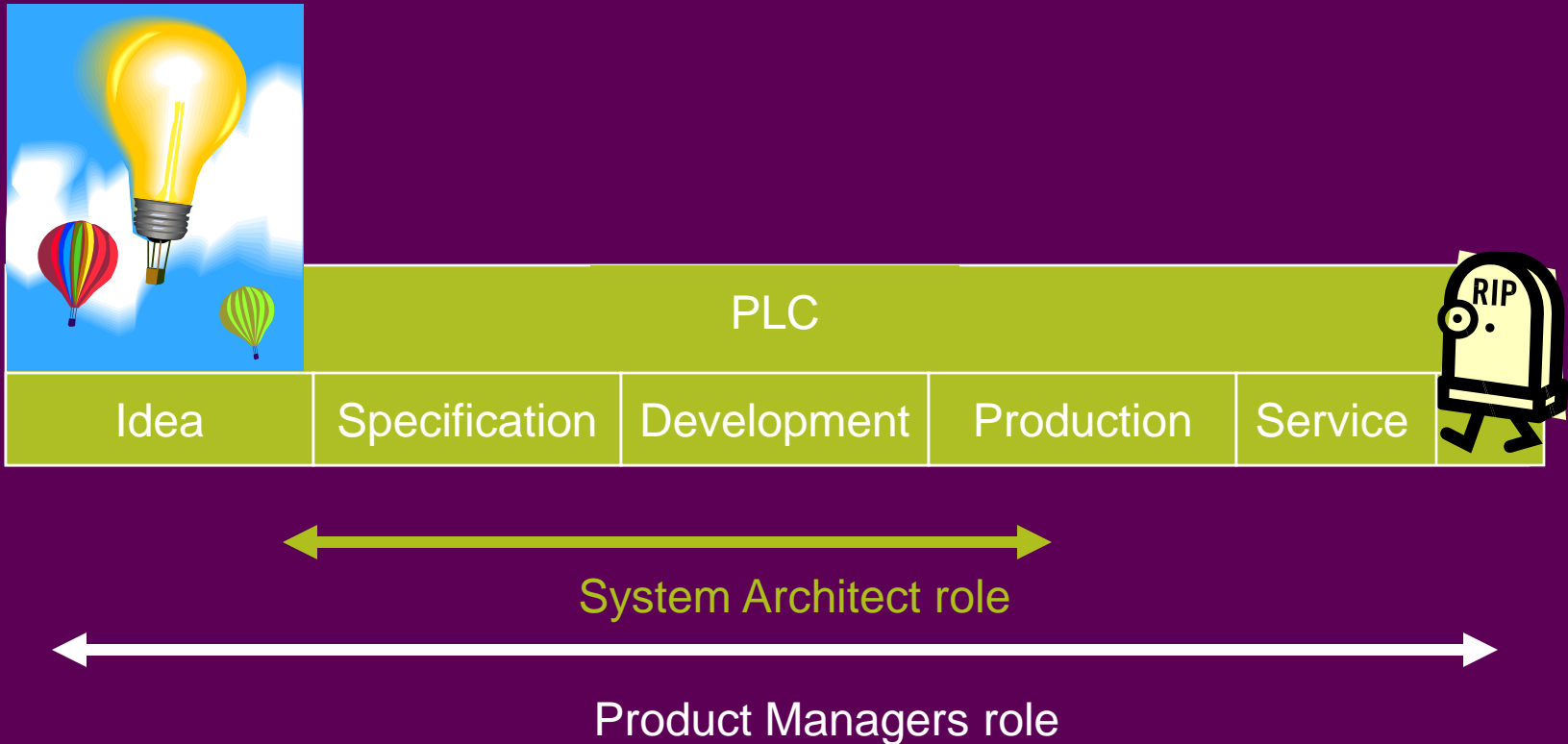
## System Architect

- Architectural choices
- Technology choices
- System specifications
- Interface specifications
- **Standardizations**
- Security and impact analysis
- Oversee development quality and testing
- Participate in development process description

## Product Manager

- Manage the product life cycle
- Financial justification
- Market requirements
- Commercial requirements
- **Define end-user use cases**
- Marketing
- Participate in business process description
- Maintain 5 year road maps





Although it seems the system architects role is smaller in time then that of the PM the continues development of new releases and products overlaps the PLC as such It is clear he has a permanent role as well.



System Architect role



Product Managers role



System Architect role





market input  
 technology input  
 customer feedback

commercial brief  
 commercial requirements specification  
 5 year product roadmap

functional requirements specification  
 technical specification  
 system architecture  
 interface specifications

module specifications  
 test specifications



## Summary

- The system architect's role is not confined to the technical part only.
- In order to successfully develop products the SA as part of the A-Team plays an important role.
- The business processes and PLC definition should reflect this. If not present the SA should play a role in getting them defined.
- The team should be empowered by senior management, so they can say:

The A Team

“I love it when a plan comes together”

THANK YOU!

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