

ER Enginyeria de Requisits

Agenda

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- Let's remember
- Objectives
- Introduction
 - Market Trends
 - Real Cases
- Functional vs Non-Functional
- Re-engineering the Requirements
- Non-Functional Requirements
- Let's play ☺ - Real case analysis
- Experiences from projects
- Conclusions

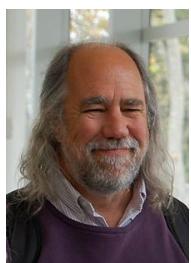
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1

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Let's remember

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Grady Booch

It is a privilege to be software developer, because we change the world.

It is a responsibility to be software developer, because we change the world.

[ICSE 2015 - Grady Booch Keynote \(1h23m\)](#)

2

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Objectives

Understand the Non-Functional Requirements:

- How to define them**
- Metrics to consider**
- Impact on End Users**
- Quality Assessment**
- What if... We miss to define NFRs**

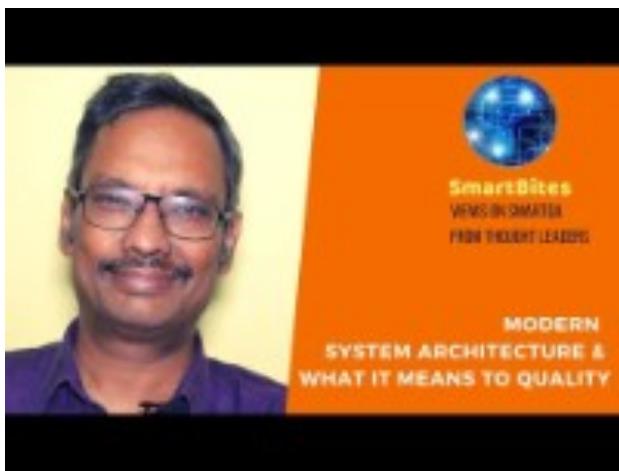
Do you think NFRs are considered / impacting Business Solutions today?



8 objectius específics

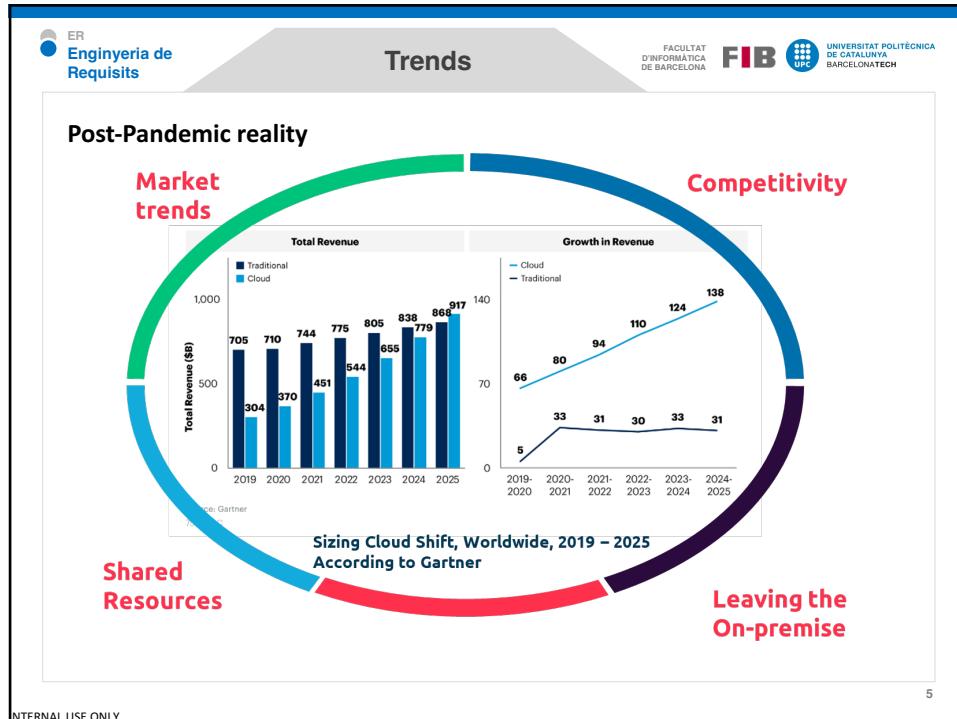
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Some Inputs from Market



NFRs are key in Modernization!

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Real Cases

LLOYD'S

HT TECH

Meta

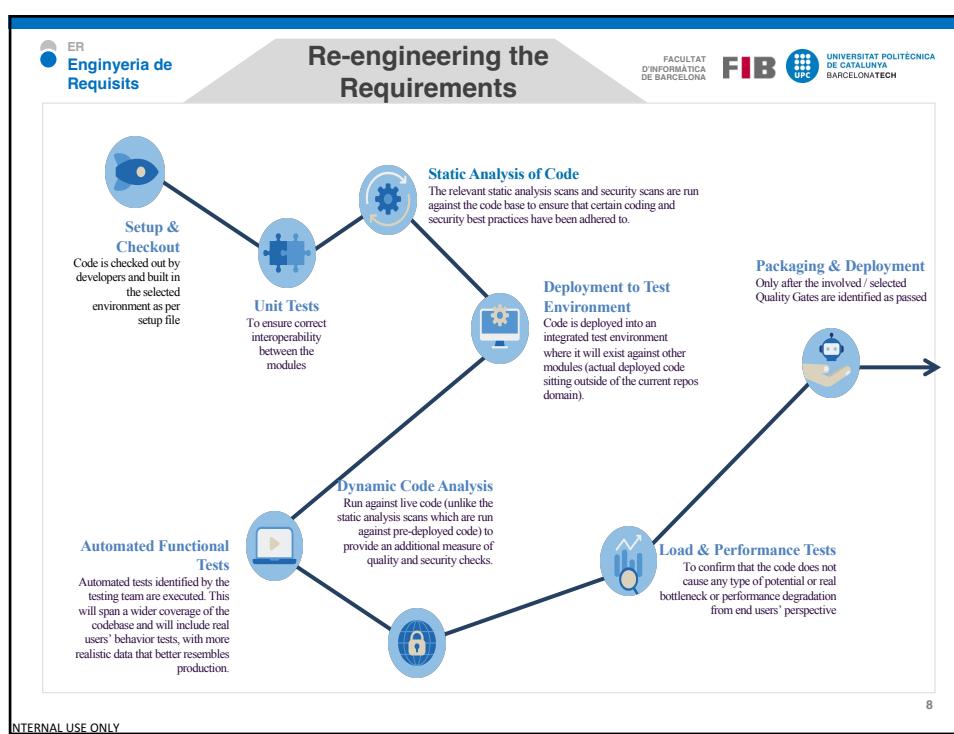
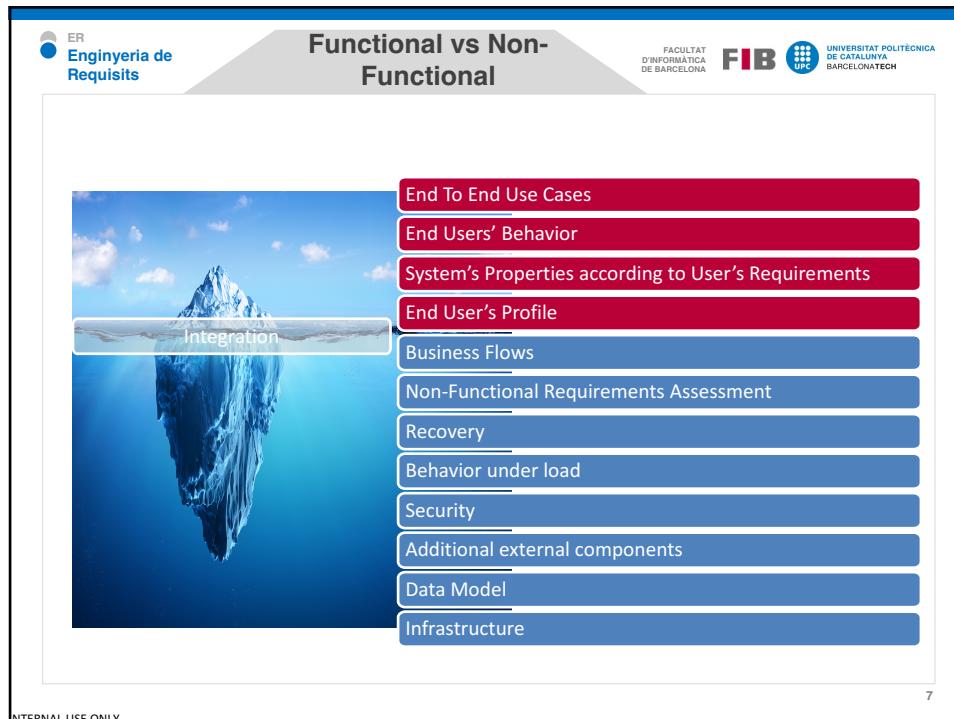
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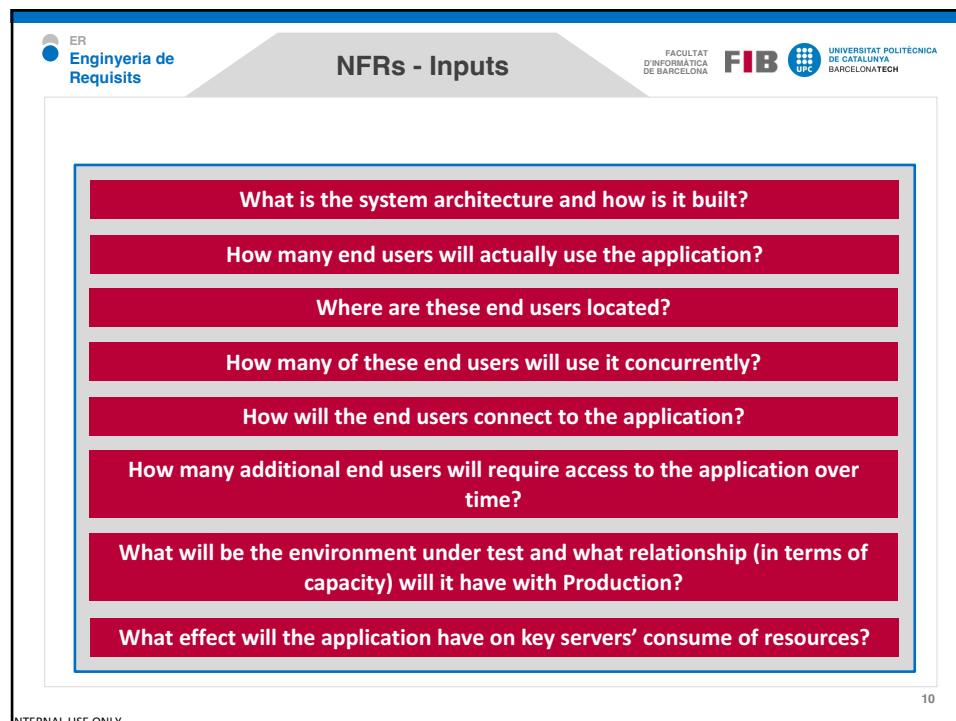
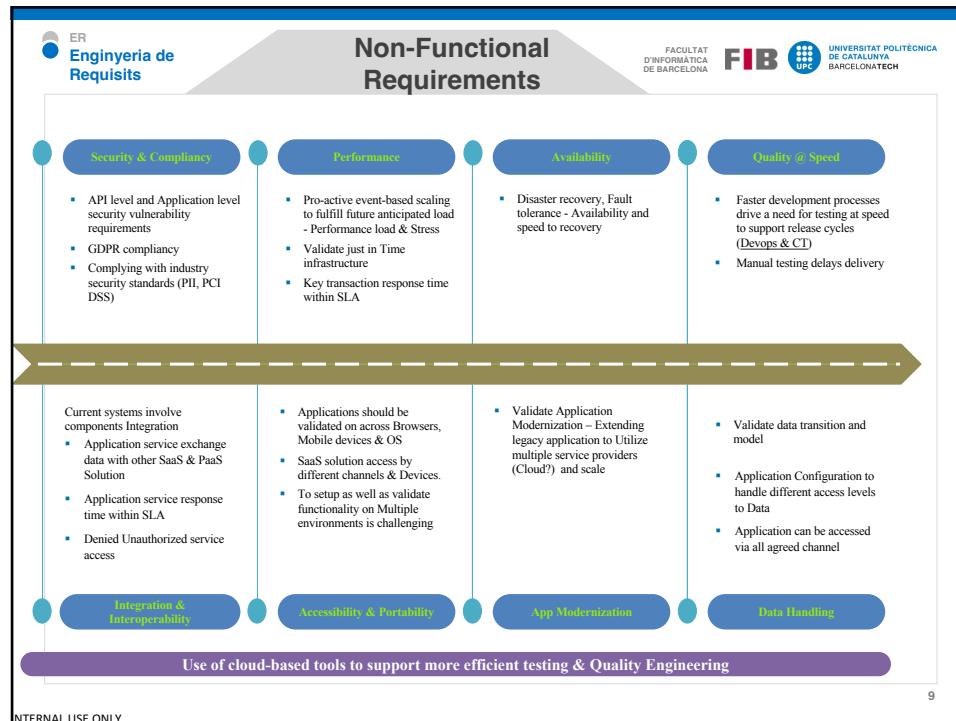
Cataluña suspende el requisito de certificado covid por un colapso del sistema

En las últimas horas el sistema de La Meva Salut se ha colapsado y muchos usuarios no pueden descargar el código QR

Un camarero comprueba el pasaporte covid de un cliente. (EFE/ Marta Pérez)

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Let's Play

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Let's consider TicketMaster Application, what are our Requirements?



Type of Requirement	Impact	StakeHolder	Metric
Functional			
Non-Functional			

11
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Real examples NFR Assessment

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Context

Business Key application, in order to find a more efficient resources consume, was re-designed to fit cloud infrastructure

Challenge

Code was developed and progressively validated, which forced to coordinate efforts

Objectives

Assess system's stability under high volume of users uploading and to processing data and configure the Infrastructure

Solution

- Detection of most sensitive to increasing load services
- Tuning of different escalation parameters

Continuous NFRs Assessment in parallel to developing and infrastructure's configuration allowed to take an initial Baseline, analyze metrics, size the infrastructure and configure scalation rules

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**Real examples
NFR Assessment**

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Conclusions

- Application Context** → Let's clarify main application's goals and the architecture we may dispose of to make it working
- Identification of main business goals** → Let's make sure that all the stakeholders understand not only the functionality of the application, but also there must be a full alignment of the key cases
- Environments and resources** → Let's ensure that we dispose of different environments and that they are properly maintained and dimensioned
- Non-functional requirements** → Let's make sure that, even before we start designing an application, volume of work this should handle and expected response times are clear

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