



Retos y tendencias de la metrología como herramienta de la calidad en el nuevo paradigma de la industria 4.0

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IK4-Tekniker

Bilbao, 20 de octubre de 2016



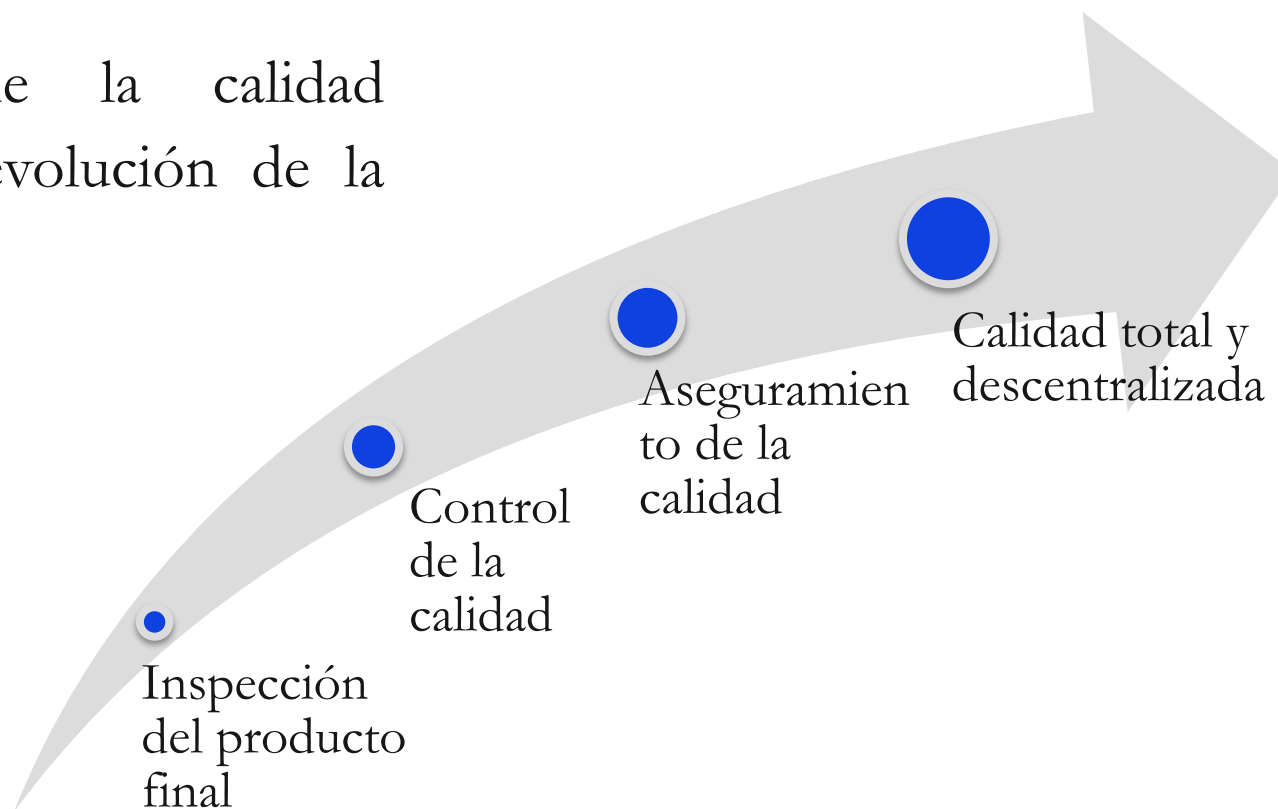
“We wanted to talk about quality, improvement tools, and which programs work. He wanted to talk to us about management, cultural change, and senior managers’ vision for the company.”

A Ford executive in 1990, regarding a consultation with W. Edwards Deming



XXI Congreso de Calidad en la Automoción

Evolución de la calidad
acorde a la evolución de la
industria

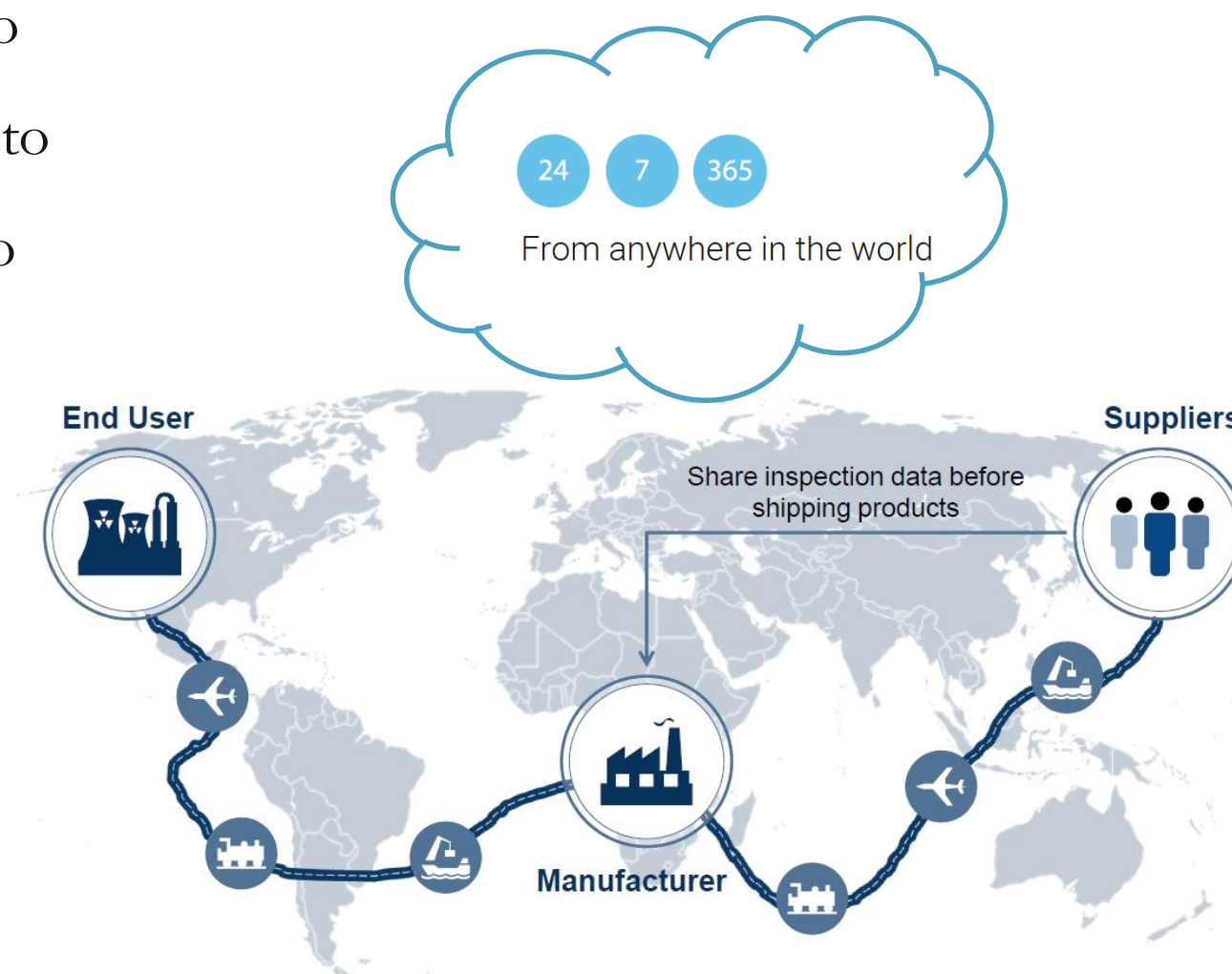




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Tres son las bases del nuevo modelo de calidad:

- Calidad en el proceso
- Calidad en el producto
- Calidad en el servicio





XXI Congreso de Calidad en la Automoción

“Lo que no se define no se puede medir. Lo que no se mide , no se puede mejorar. Lo que no se mejora, se degrada siempre”

Lord Kelvin

Metrología 4.0

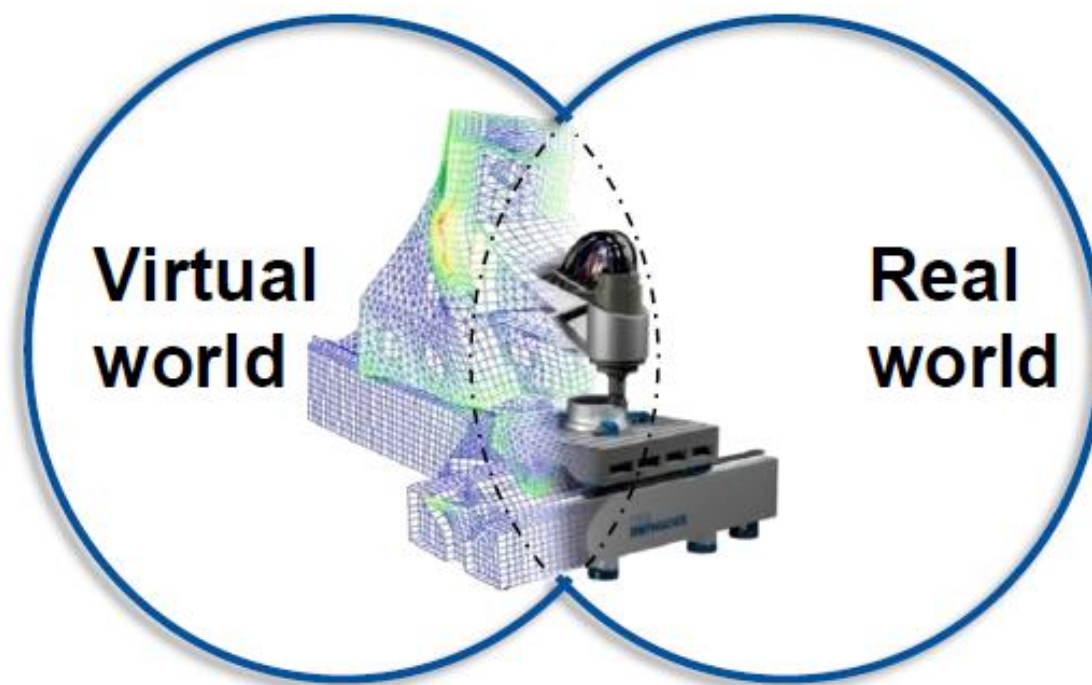




Laboratory

At-process

In-process






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El denominador común...



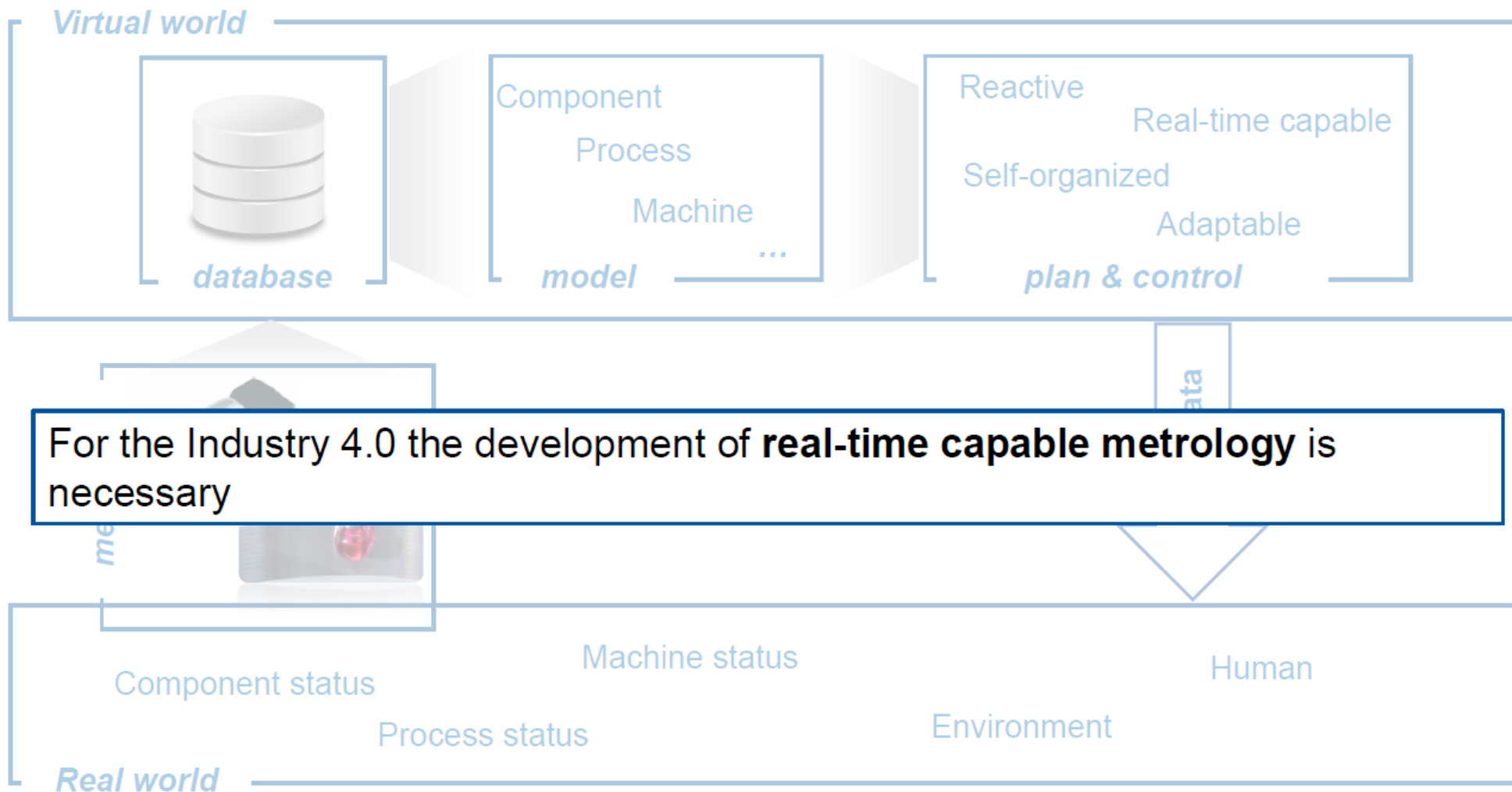


Retos de la metrología para la industria 4.0





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Adquisición masiva de puntos



3



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Información \neq Conocimiento



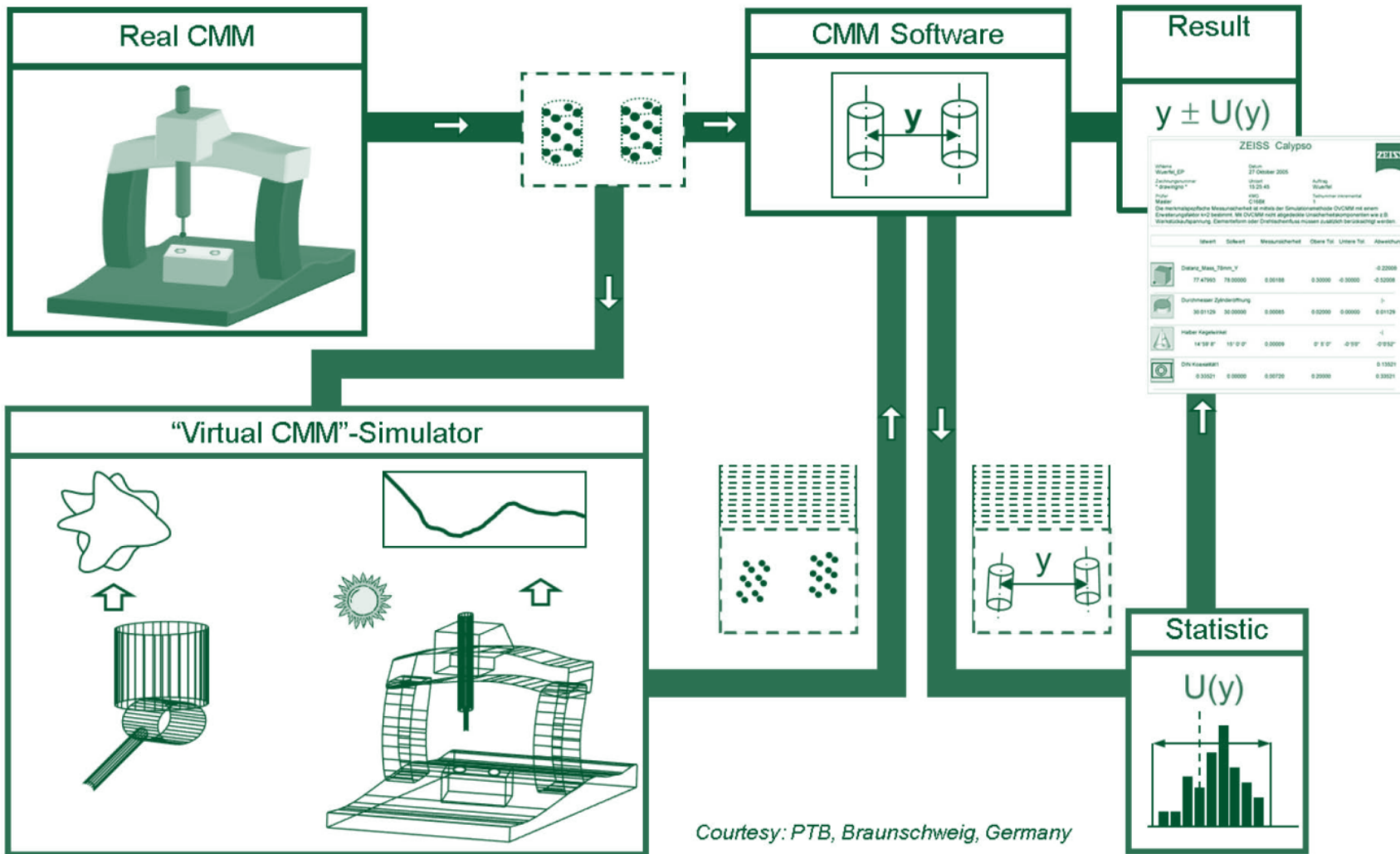


Estandarización



5

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BIG

DATA

USE
ONE THE
SOFTWARE

BUSINESS
MOVING

ANALYTICS

SAN
PARALLEL

SIZE
NEEDED

PETABYTES

**INTERNET
TECHNOLOGIES**

DISTRIBUTED
MANAGEMENT

SOCIAL LARGE

EVERY
LARGER

STORAGE

USING TYPES
GARTNER MASSIVELY
BIOLOGICAL
HUNDREDS

DISK
SHARED
RELATIONAL
TIME
SYSTEMS
NETWORKS
INFORMATION

RECORDS

COST CONTINUES
CITATION
COMPLEX

DIFFICULTY
TARGET
ABILITY

SENSOR ARCHIVES

TERABYTES
MPP RESEARCH
DATABASES

SETS

EXAMPLES

APPLIED

MAY

SOCIAL

ELAPSED
CURRENT

THOUGHT

APPLIED

CAPTURE
MANAGE
GROW

STORE

EVERY
LARGER

ELAPSED

CURRENT

COMPUTING TOOLS
SET
GENOMICS
WITHIN PROCESS
DEFINITION
SEARCH

CONNECTED

RECORDS

COMPLEX

ABILITY

EXAMPLES

PERFORMANCE
ALSO

INCLUDE SYSTEMS
NETWORKS

RECORDS

COST CONTINUES

COMPLEX

ABILITY

EXAMPLES

APPLIED

DISK

INCLUDE SYSTEMS

RECORDS

COST CONTINUES

COMPLEX

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EXAMPLES

APPLIED

RELATIONAL
TIME

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COMPLEX

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EXAMPLES

APPLIED





Educación



"Mr. Osborne, may I be excused? My brain is full."

