

Industria 4.0

IMPORTANCIA DE LA TECNOLOGÍA EN LAS INDUSTRIAS DEL FUTURO. DISEÑO COLABORATIVO INGENIERÍA CONCURRENTE

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Project Manager – **indigraf**

Castellón, 17 de Marzo de 2016

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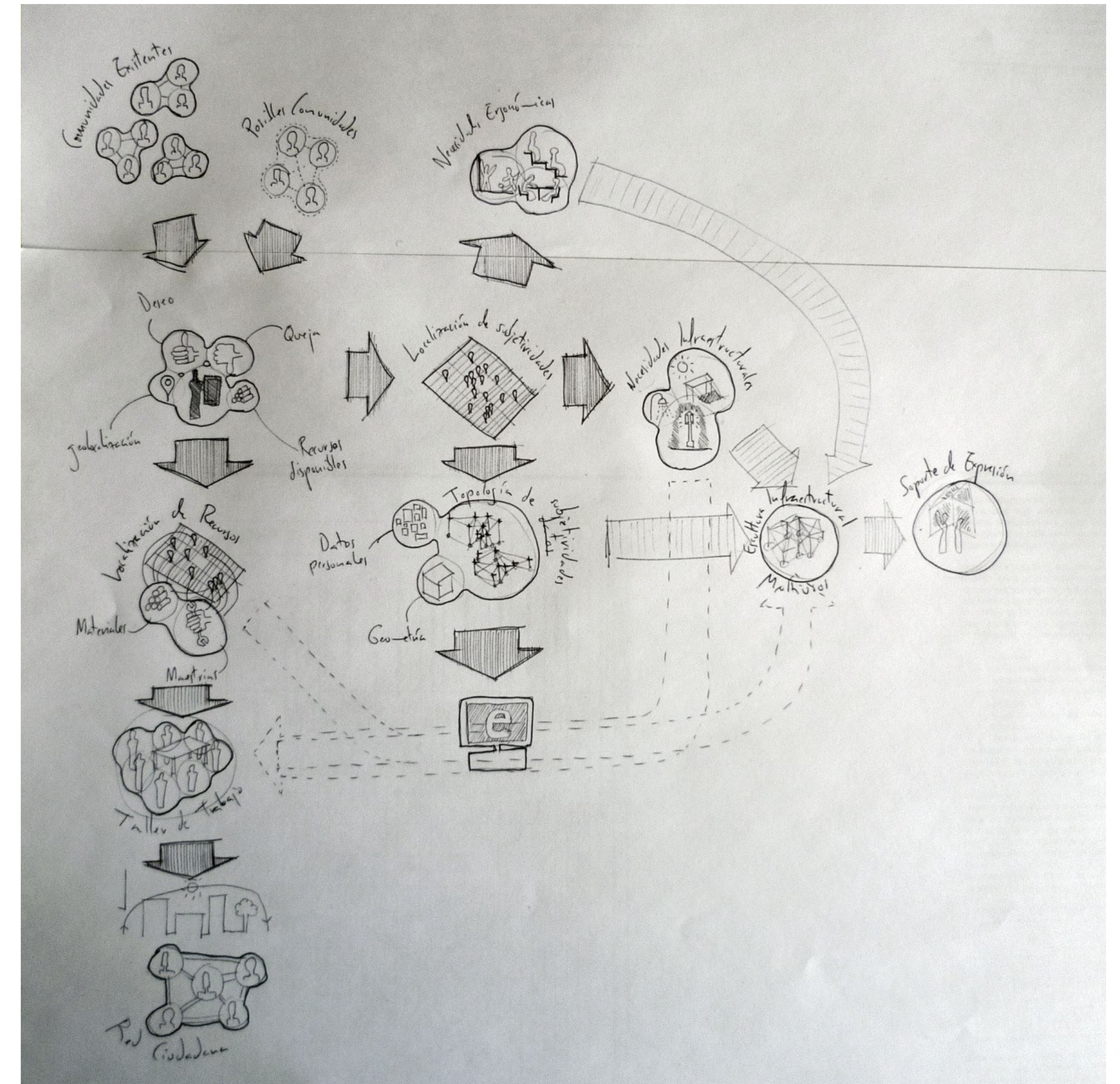
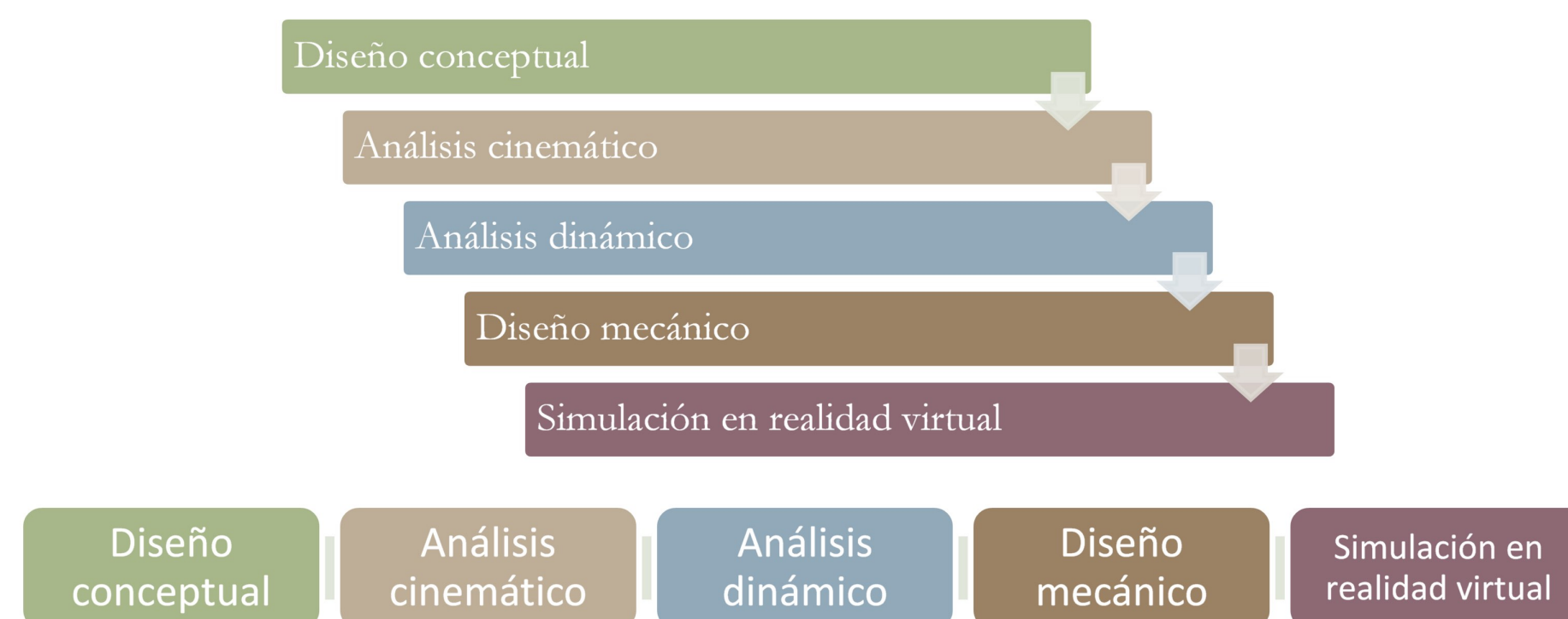


"Proyecto cofinanciado por los Fondos FEDER, dentro del
Programa Operativo FEDER de la Comunitat Valenciana 2014-2020"



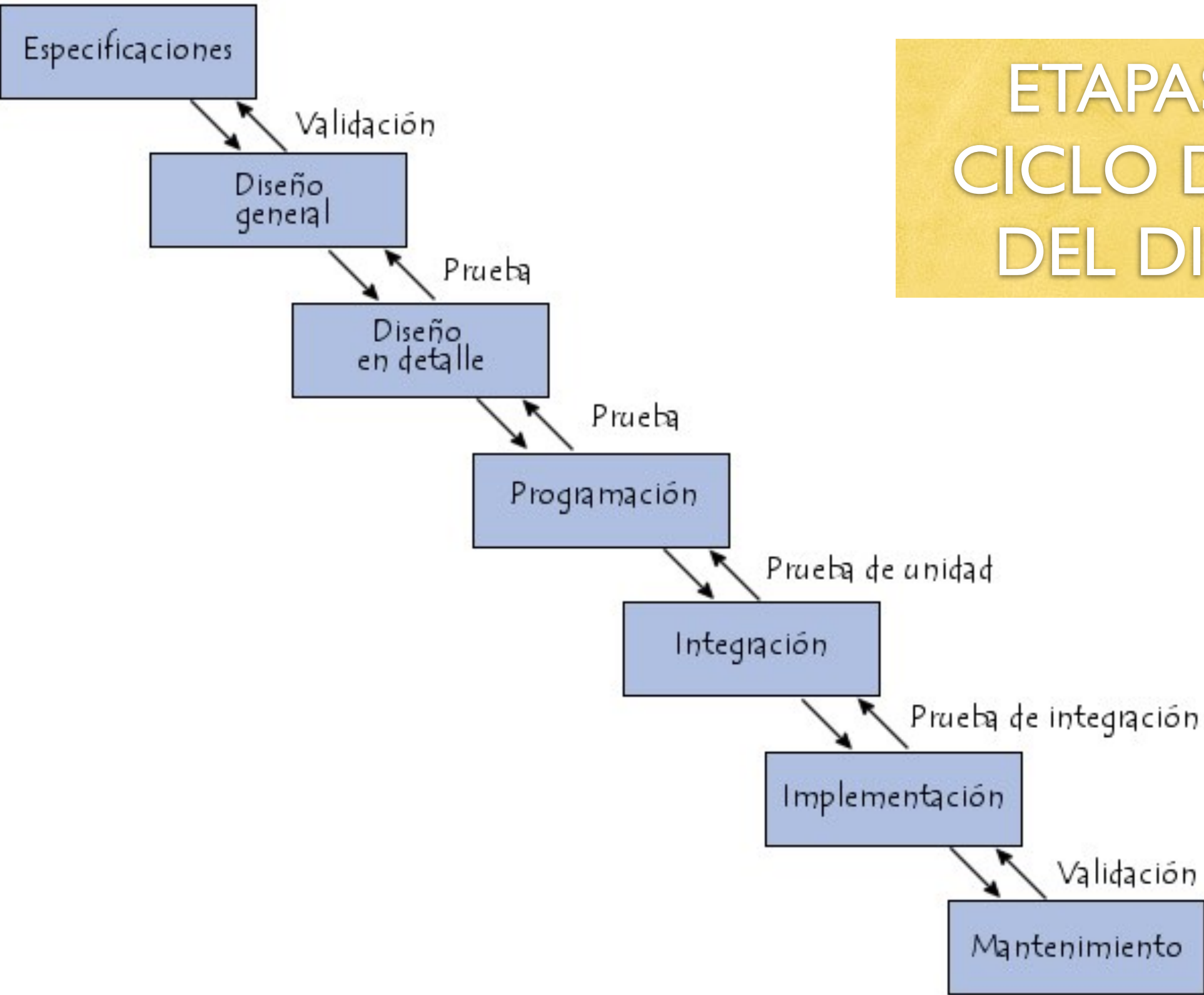
INGENIERÍA CONCURRENTE - DISEÑO COLABORATIVO

FILOSOFÍA ORIENTADA A INTEGRAR SISTEMÁTICAMENTE Y EN FORMA SIMULTÁNEA EL DISEÑO DE PRODUCTOS Y PROCESOS, PARA QUE SEAN CONSIDERADOS DESDE UN PRINCIPIO TODOS LOS ELEMENTOS DEL CICLO DE VIDA DE UN PRODUCTO, DESDE LA CONCEPCION INICIAL HASTA SU DISPOSICIÓN FINAL.



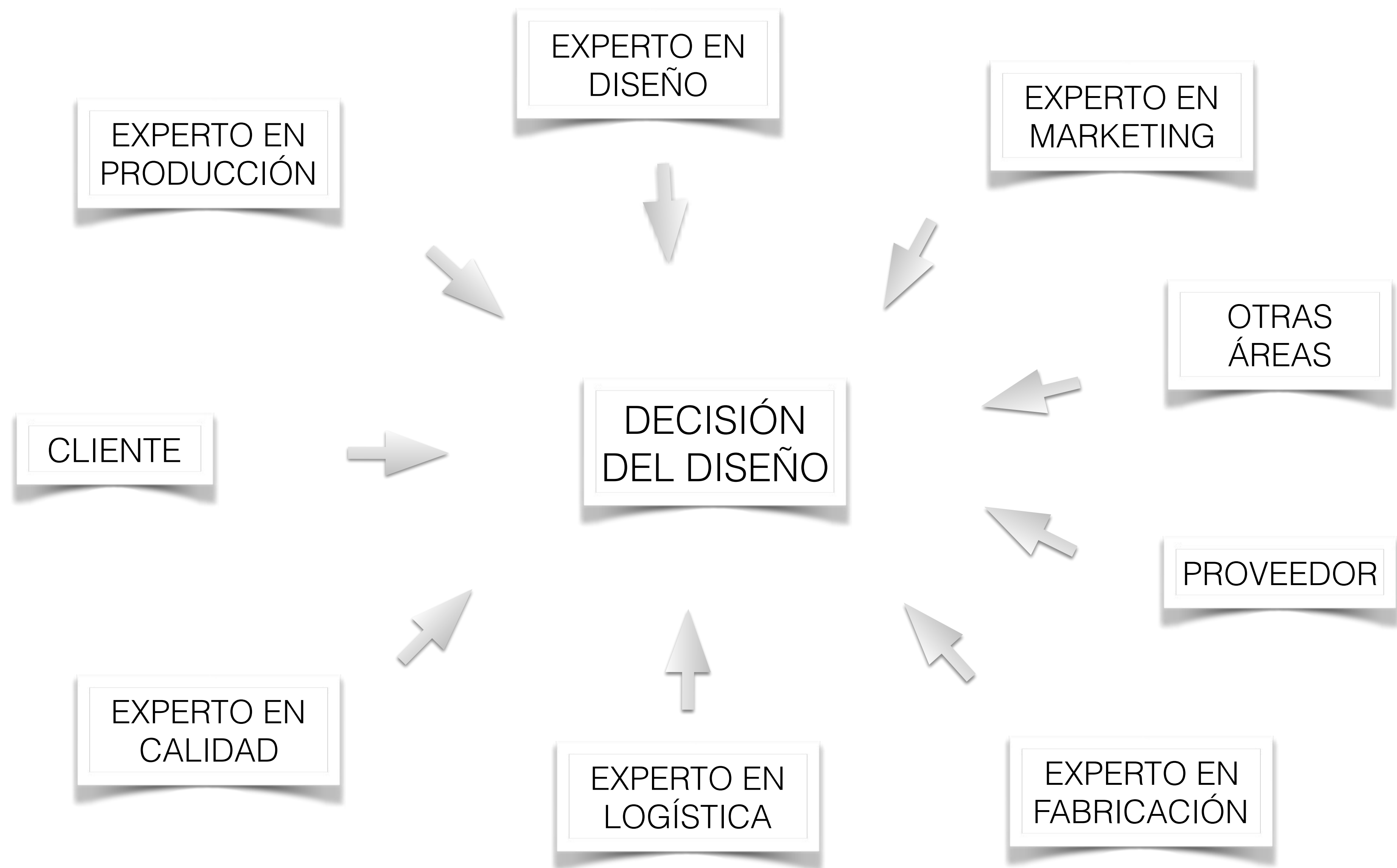
INGENIERÍA CONCURRENTE - DISEÑO COLABORATIVO

REQUISITOS OBJETIVOS RESULTADO



ETAPAS DEL
CICLO DE VIDA
DEL DISEÑO







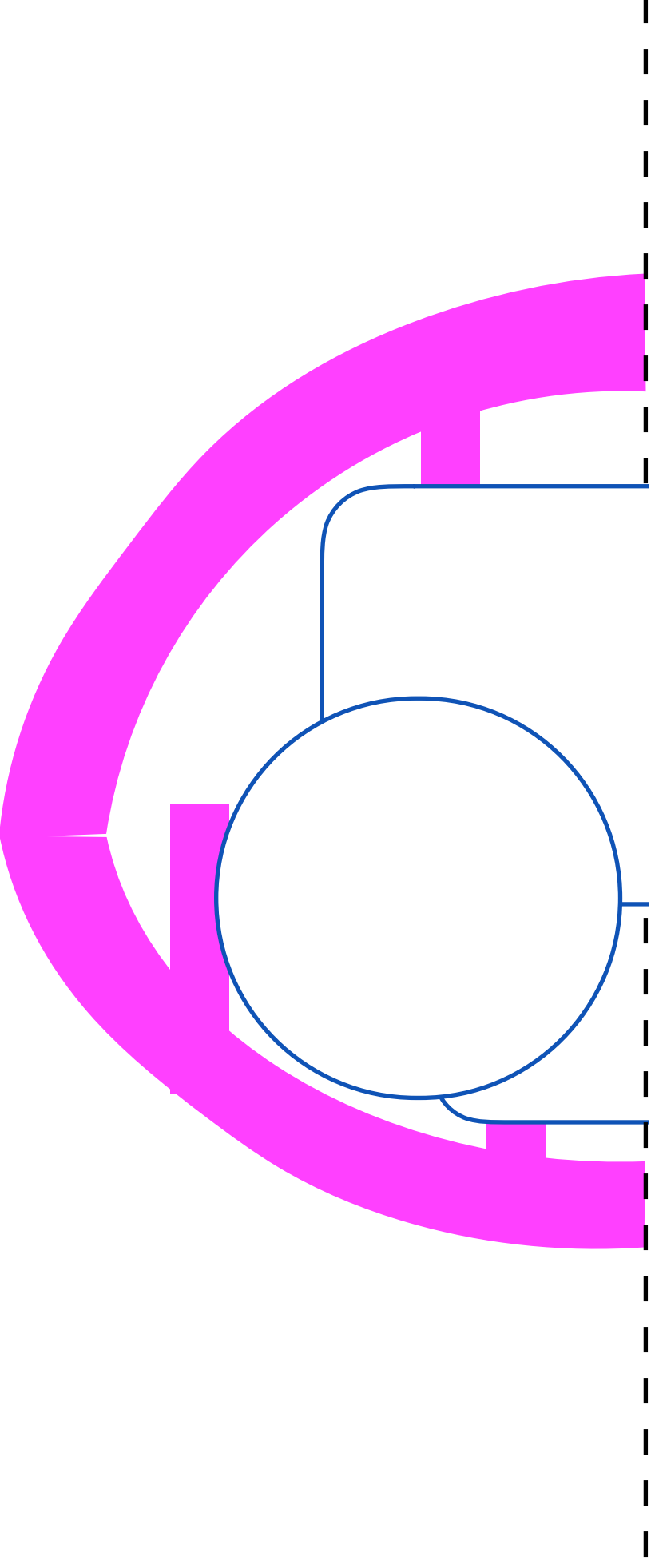
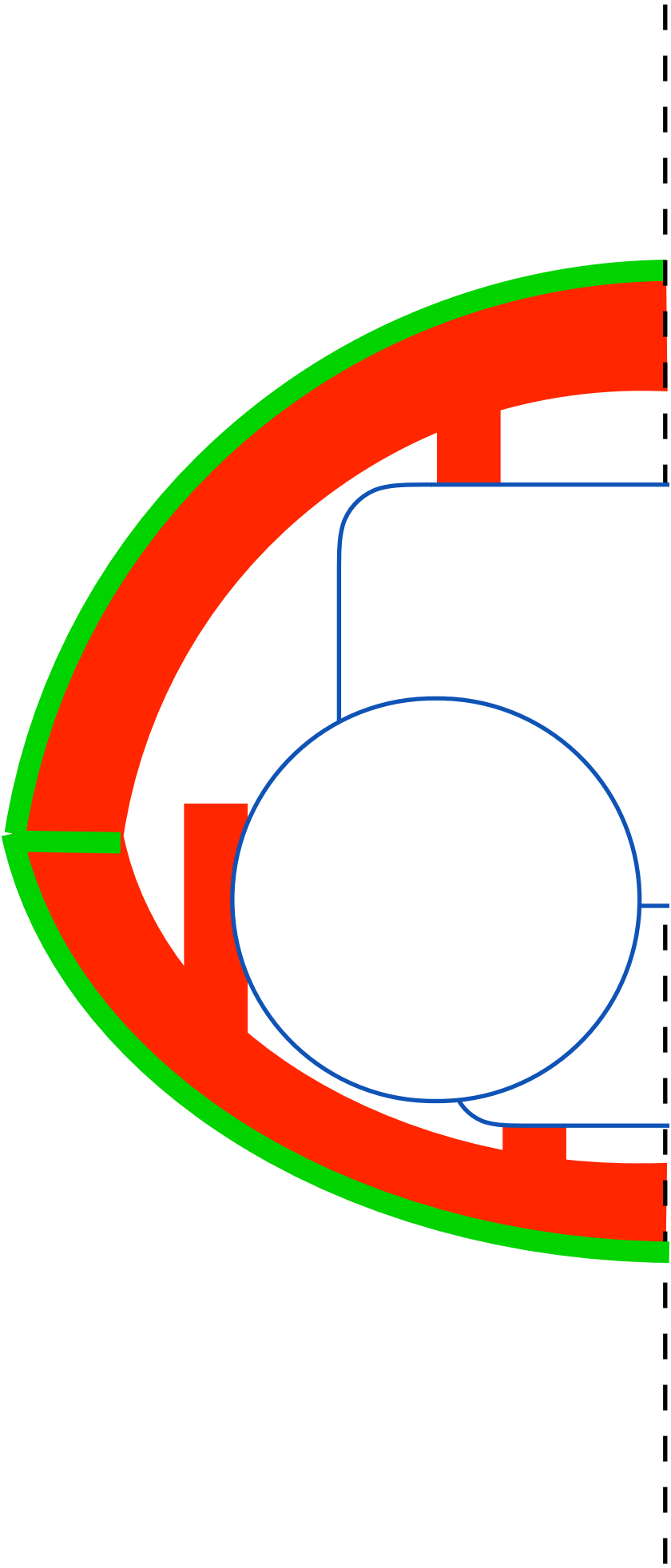
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Assuring design integrity throughout development to production

PHILIPS development

Supplier's files

- Reserved areas
- Design ●
 - I&D ●
 - Supplier ●
 - Components ○



product's section

Reserved areas

Design ●

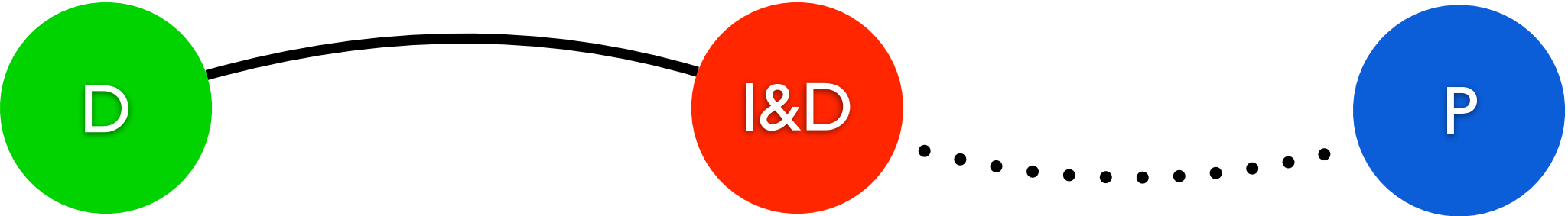
I&D ●

R&D ●

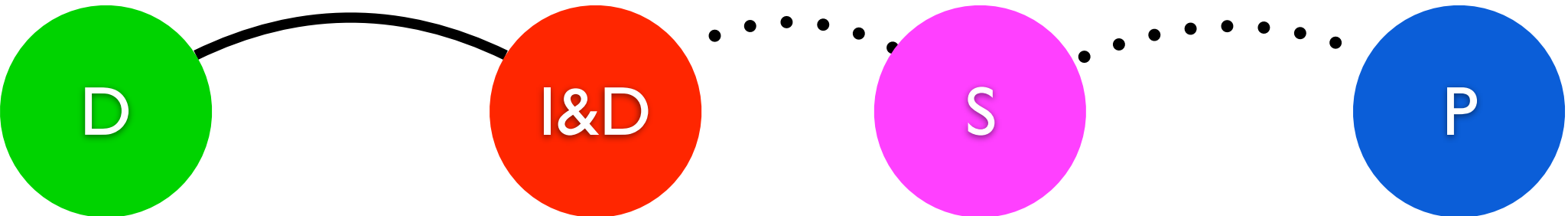
Supplier ●

Product ●

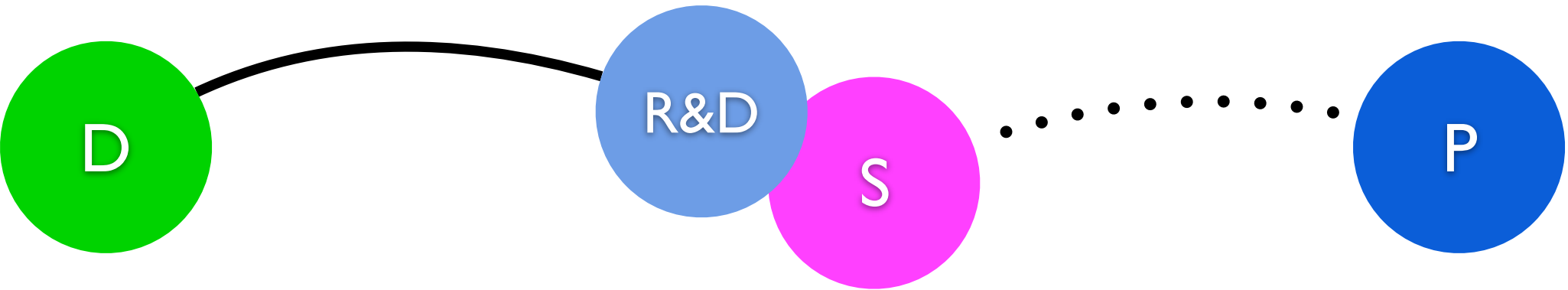
Design info. 



Full in-house development & production



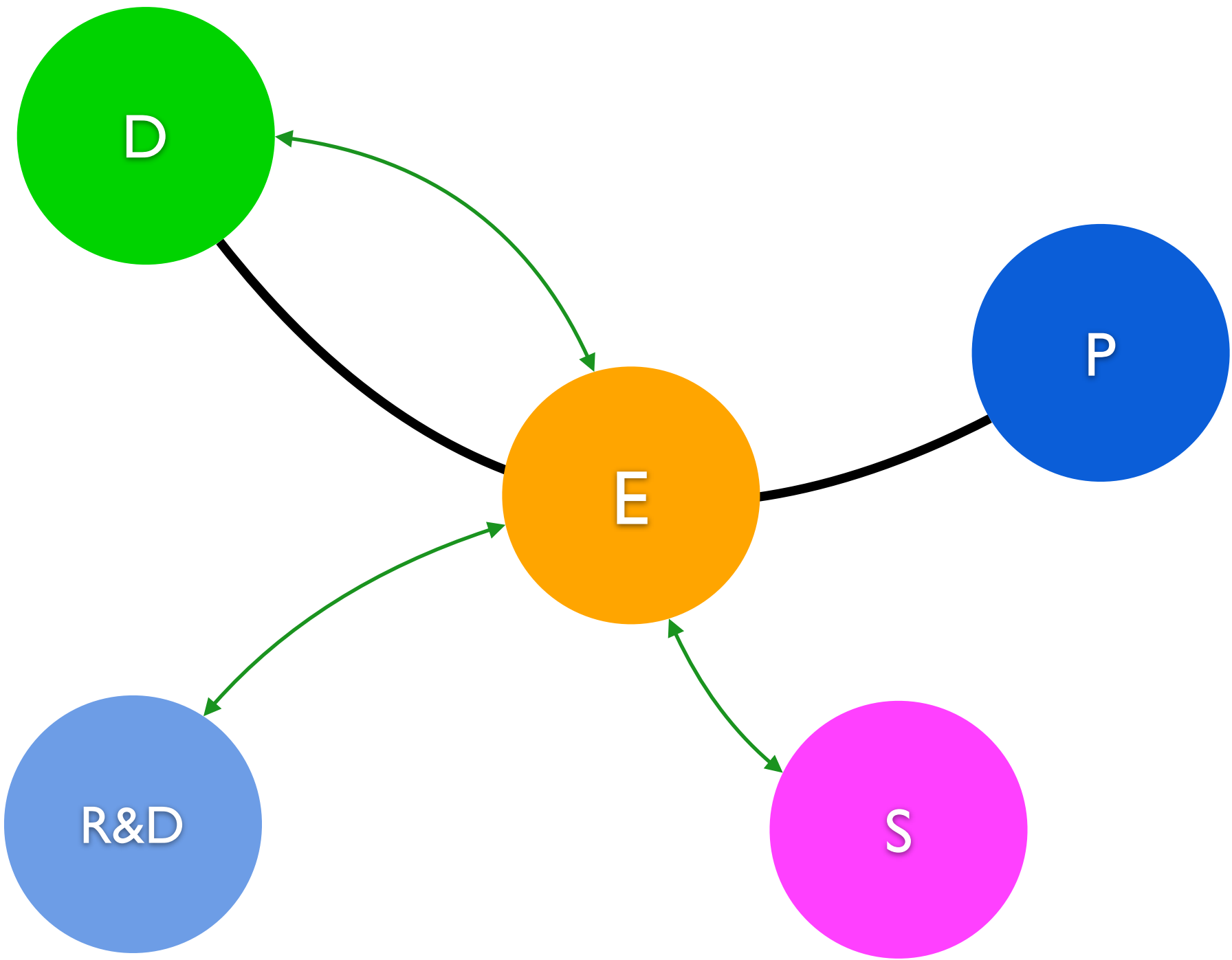
In-house pre-development with **Supplier's** development & production



OEM solution where R&D supervise the development

Reserved areas

- Design ●
- I&D ●
- R&D ●
- Supplier ●
- Product ●
- EPiCC ●
- Design info. 
- information 



Hong Kong **OEM** situation with **EPiCC live documents** for **EssentialCare**



Reserved areas

Design ●

I&D ●

R&D ●

Supplier ●

Final Product ●

EPICC ●

Components ○

Design intention

I&D information

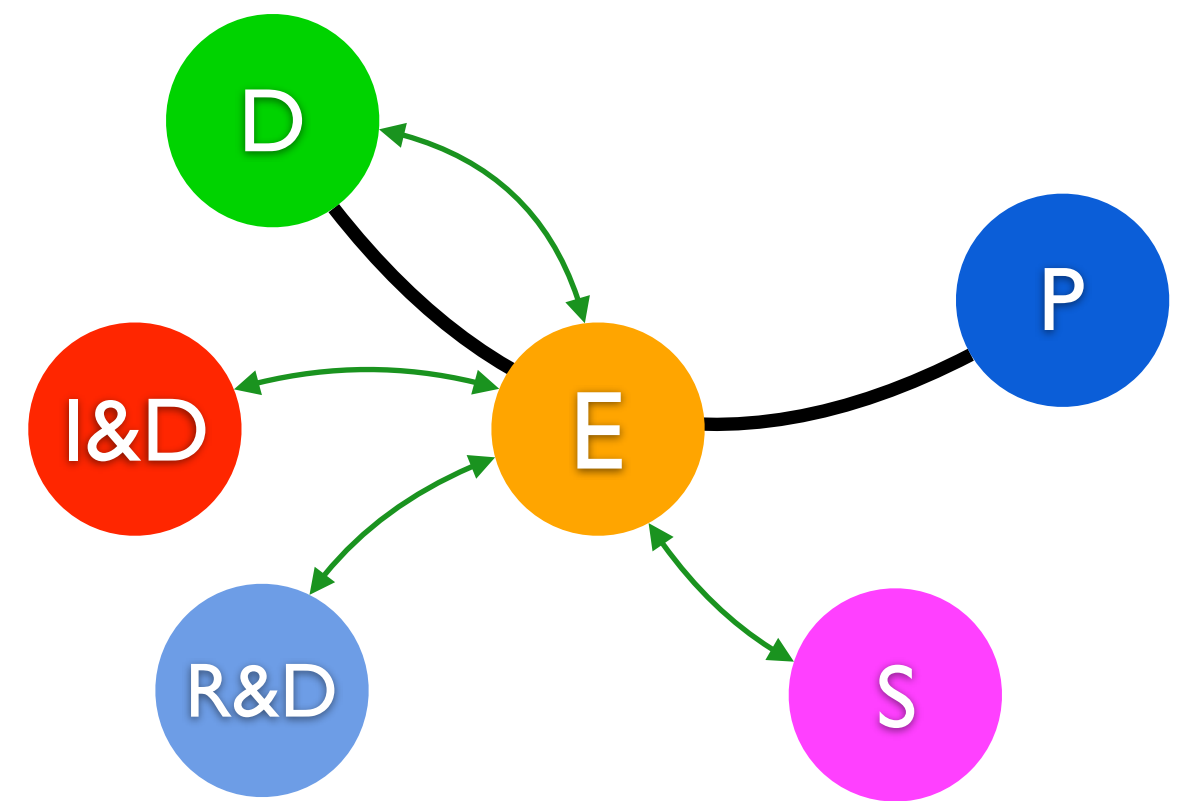
EPICC

Production file

Development using EPICC files

product's section

One live document source as 3D CAD files for Design, I&D and Supplier access



Inputs

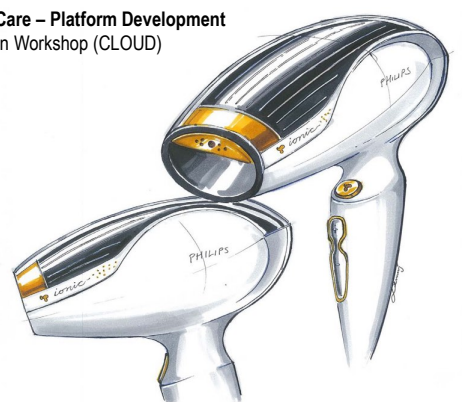
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sense and simplicity

Hair Care Platform
Design for China

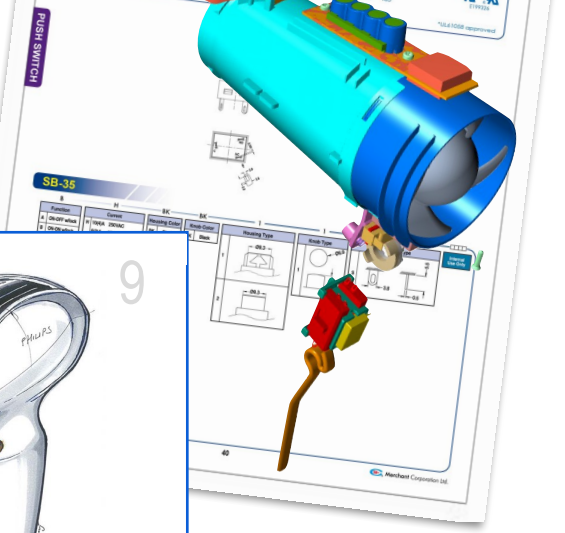
Shanghai Design Studio
Gael Prat-Pfister, Dennis Vetu
June 25th 2013

PHILIPS
Hair Care – Platform Development
Design Workshop (CLOUD)


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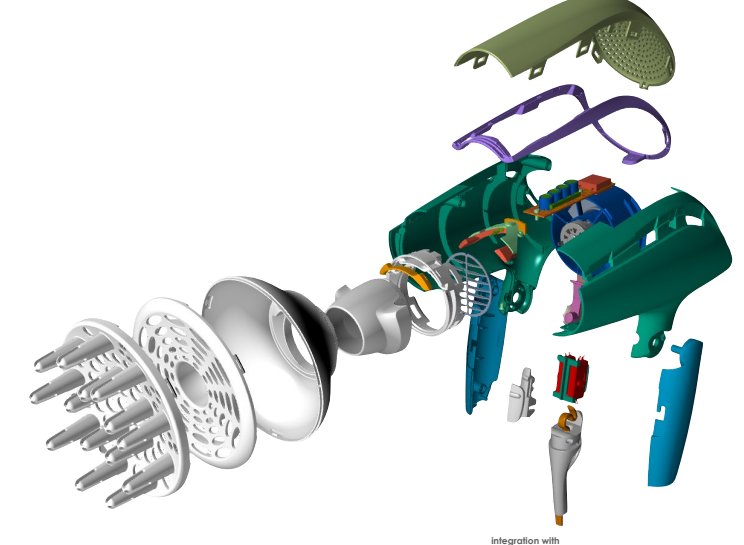
SB-35 Series



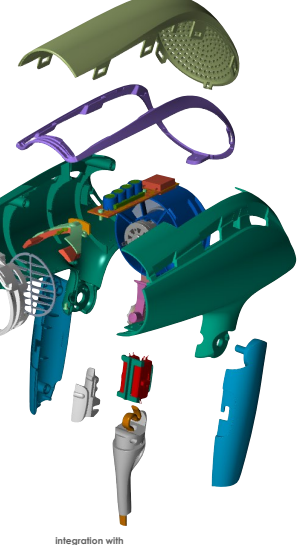
Design property




Indigraf's added value




Engineering files are feed with EPICC files to assure the design integrity



EPICC



Integration with Engineering files to model using EPICC geometry



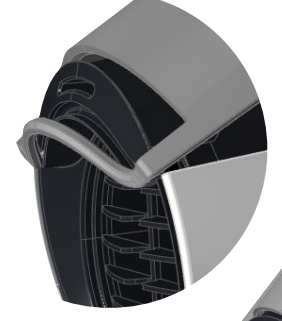
CONFIDENTIAL

Baños

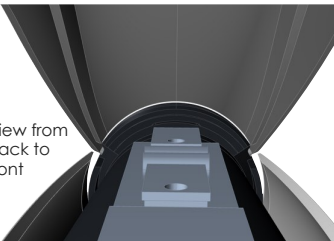
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EPICC integration

Deco Ring assembled front front to back



View from back to front



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Phoenix


Indigraf

Pre-Engineering files, Assemblies, Mould definition, 3D PGDs...

Wangli Short



Wangli Long



CONFIDENTIAL


PHILIPS

Wang Zi


Indigraf

3d CAD detailed files and KeyShot files


Wangli Short



Wangli Long



Wangli Long & Short



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Files for dummies

Line drawings and surfaces



Integrated design geometry with engineering CAD files





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Thank you