

La révolution numérique de la conception



Table Ronde Innovation

Institut Telecom

Agenda

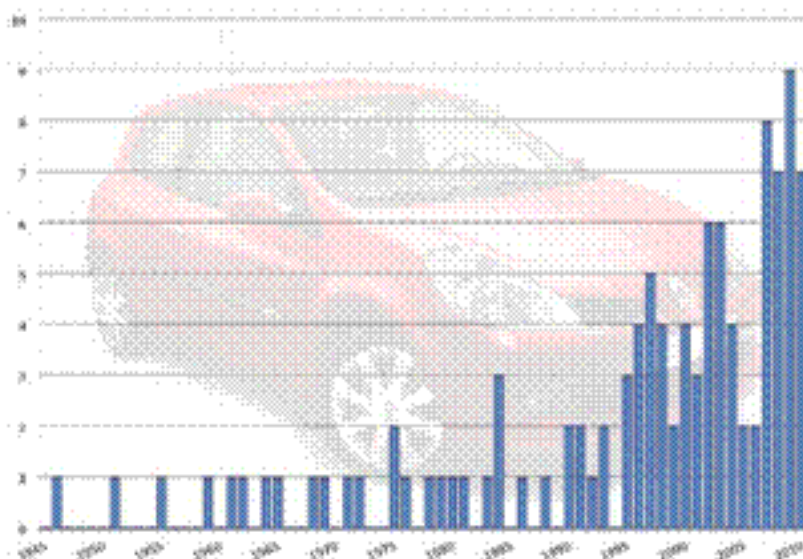
1. L'innovation intensive
2. La révolution numérique de la conception innovante
3. Le modèle d'innovation de Dassault Systemes
4. De nouvelles perspectives
5. Questions et réponses



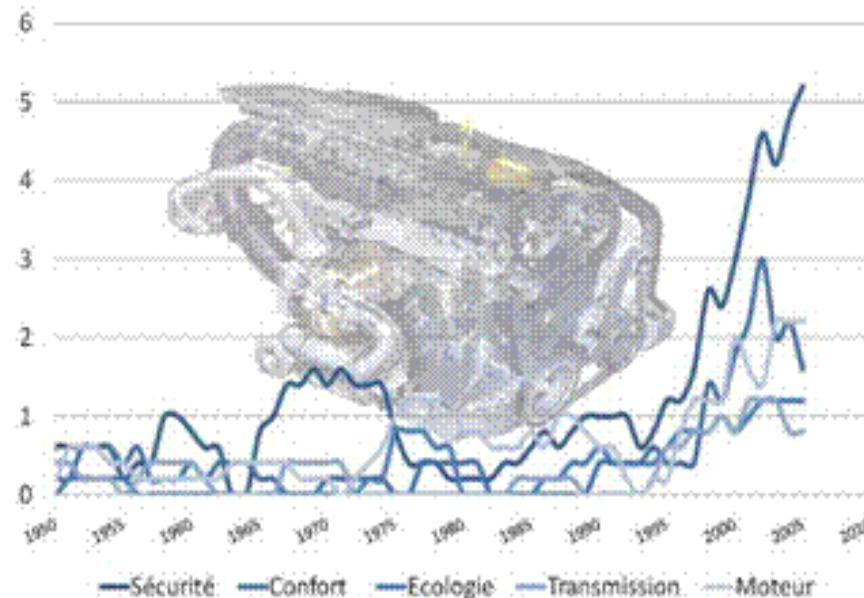
1. L'innovation intensive



Nombre de lancements véhicule d'un constructeur depuis 1945



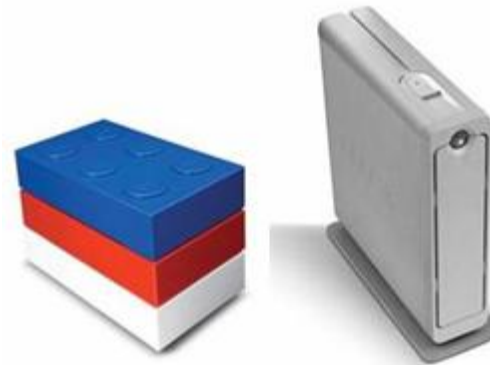
Nombre d'innovations lancées sur le marché depuis 1950



Que signifie « Innovation » ?

Transformer l'identité des objets

- Nouveaux espaces fonctionnels
- Nouvelles compétences
- Nouveaux partenariats
- Nouveaux business models
- Secteurs industriels flous, révision des frontières des systèmes

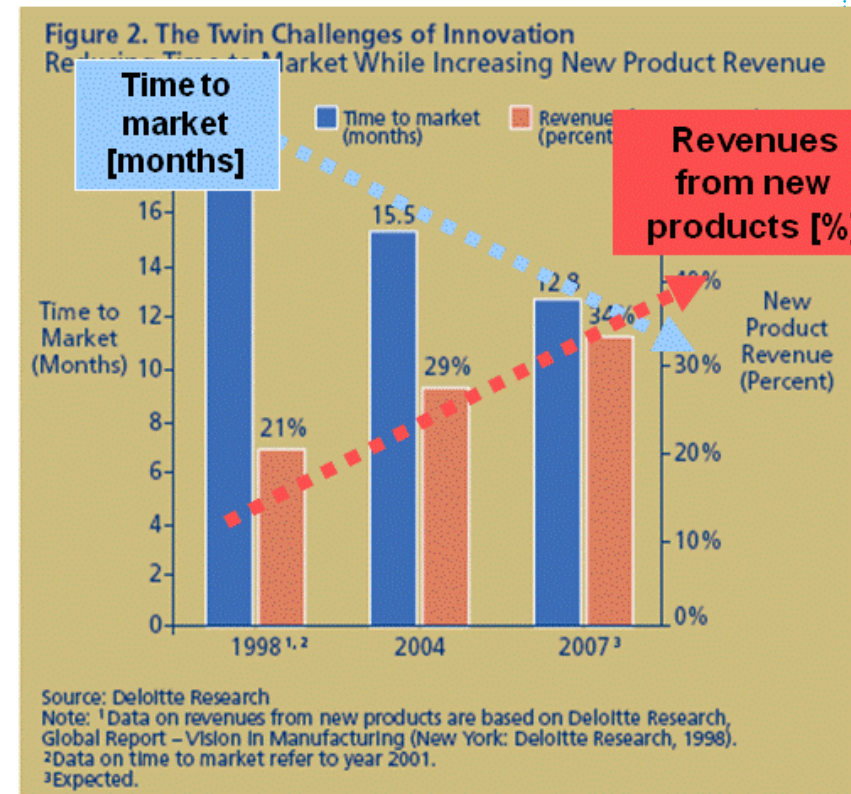


Que Signifie « Intensif » ?

Un nouveau régime de compétition

- Des innovations continues et intentionnelles
- Des technologies diffusantes
- Des nouvelles valeurs sociales et nouvelles régulations
- Des nouvelles contraintes financières : CAP plus court
- Des nouveaux concurrents low costs, puissants et disposant de capacités d'innovation

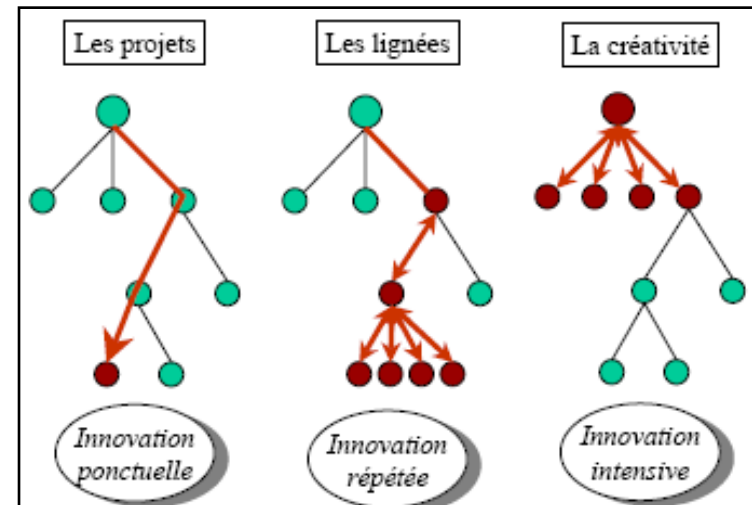
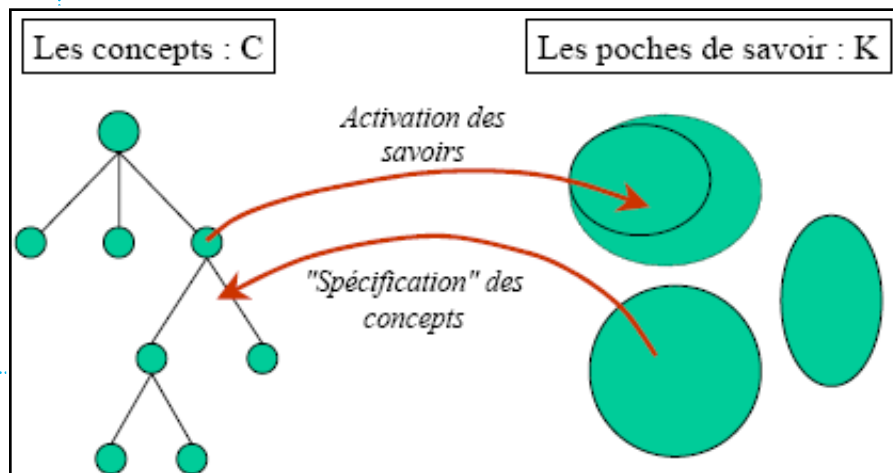
40% des revenus proviennent de produits de moins de 3 ans



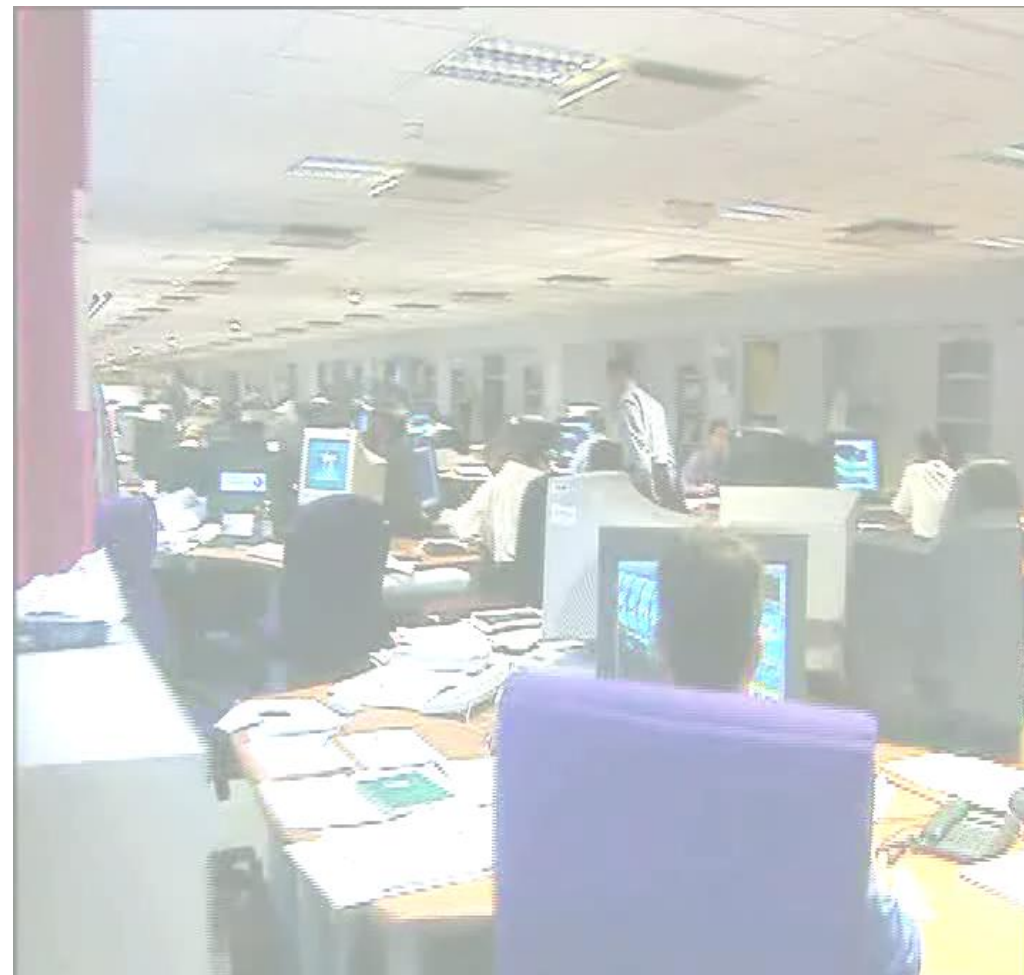
Quels principes d'efficacité?

Créer une dynamique conjointe des compétences et des produits / Services

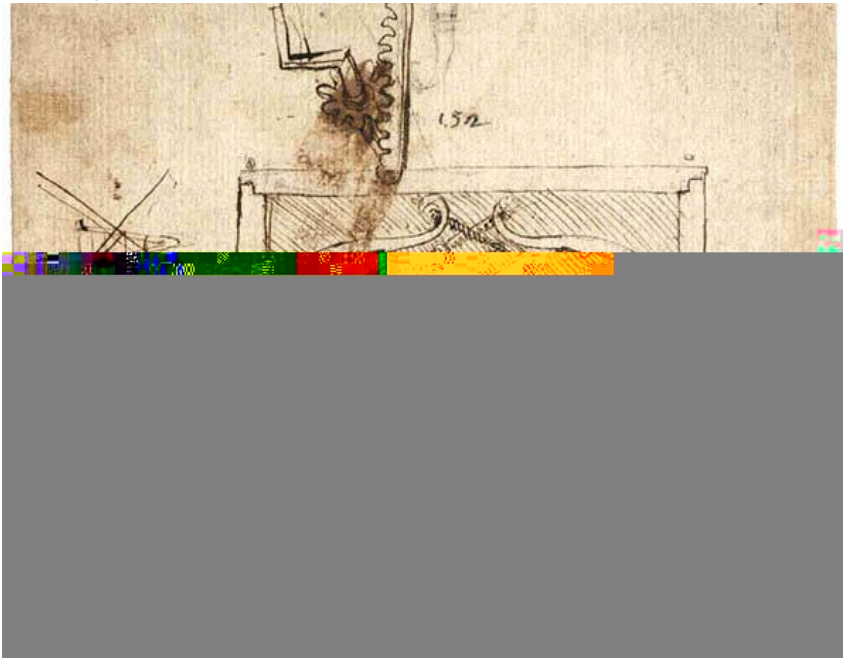
Créer des rentes d'apprentissages



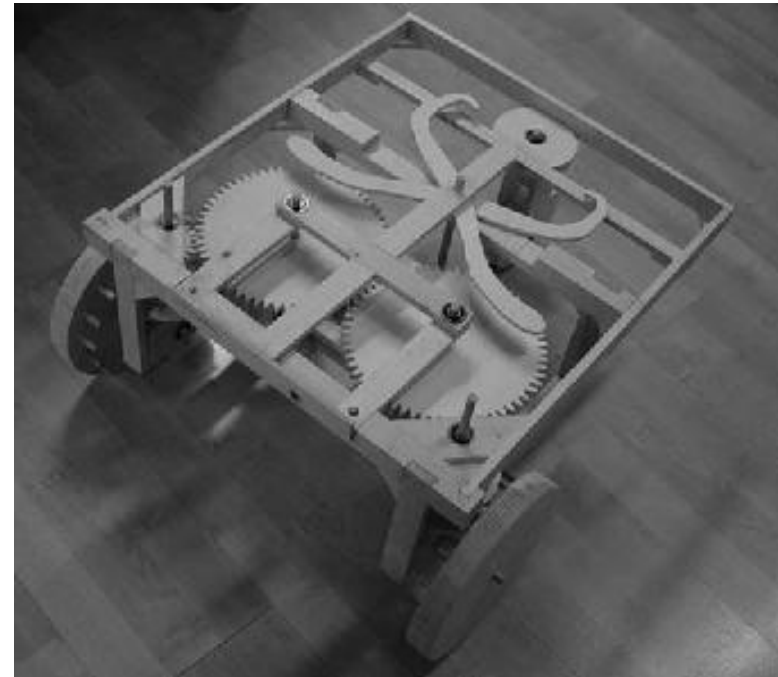
2. La révolution numérique de la conception innovante



... Or celui qui n'a pas créé le dessin ne le comprend pas ou pire, l'interprète mal



1478 ...
les dessins de Leonard

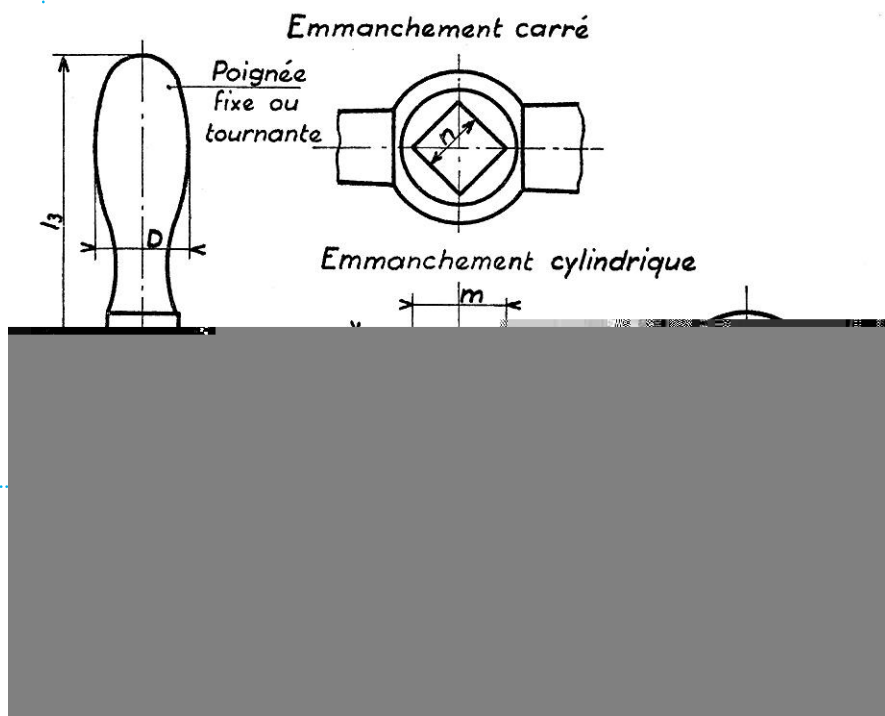


... 2004
le premier prototype fonctionnel



Une standardisation du langage et de la représentation

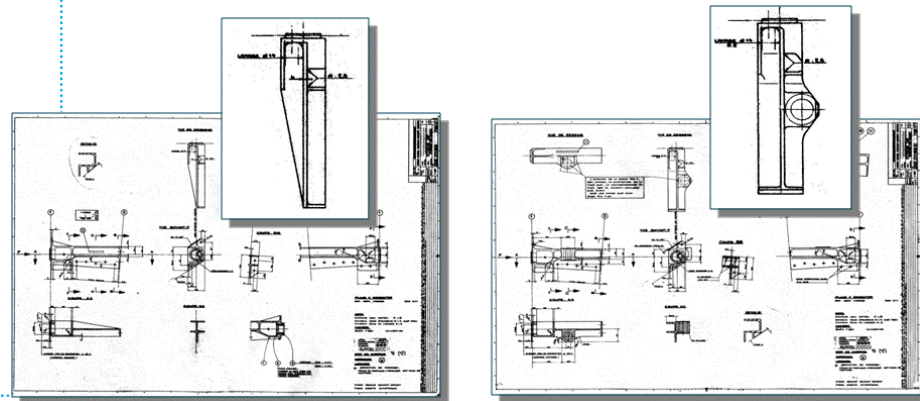
L'ère de la planche à dessin et des bureaux d'études



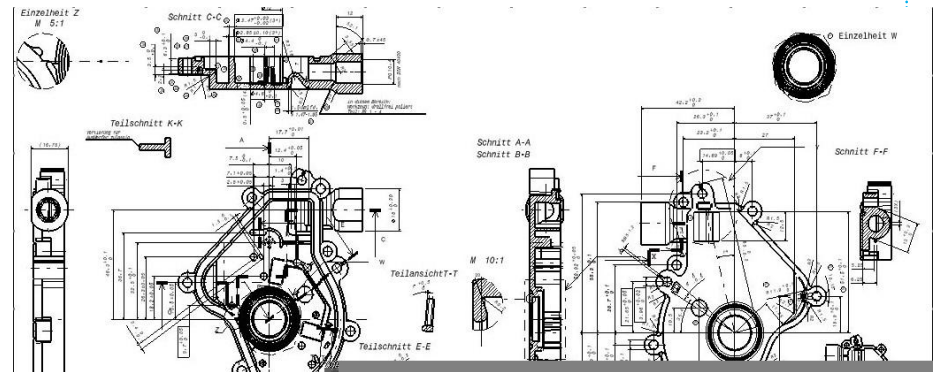


Années 70 :

Le problème : Chaque variante nécessite un nouveau plan



L'ordinateur remplace la planche à dessin

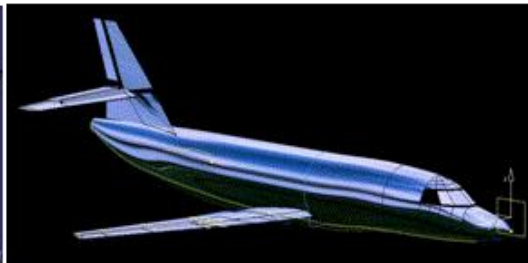
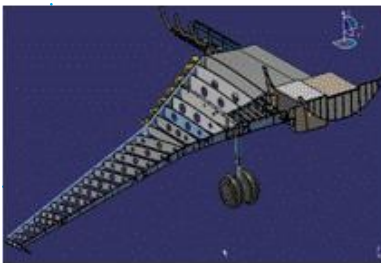
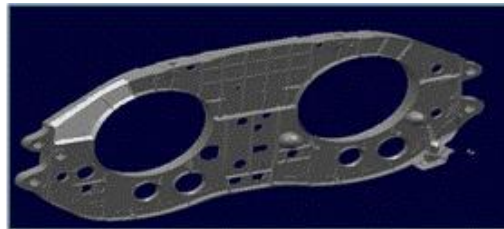
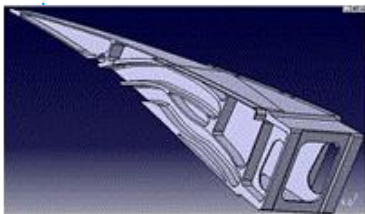




Années 80 :

Le problème : Le 2D ne permet pas la modélisation de formes complexes

Dassault la CAO 3D (Conception Assistée par Ordinateur)





Années 90 :

Suppression de la maquette physique

Au profit de la maquette numérique (DMU)

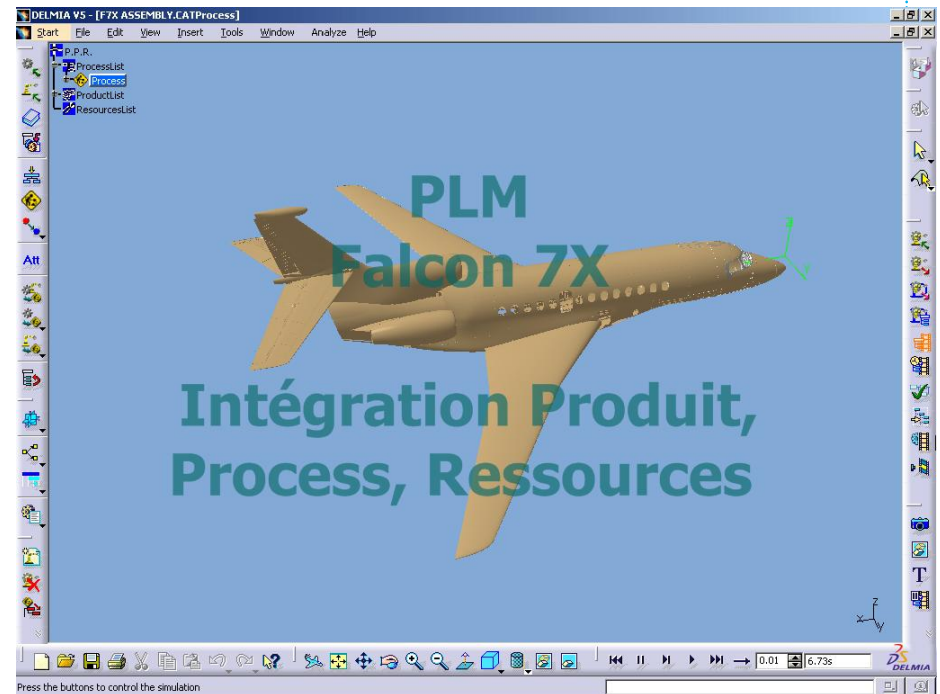




Réunir l'ensemble des métiers autour d'une même maquette numérique

- Conception & Fabrication,
- Achats & Vente,
- Support & Maintenance....

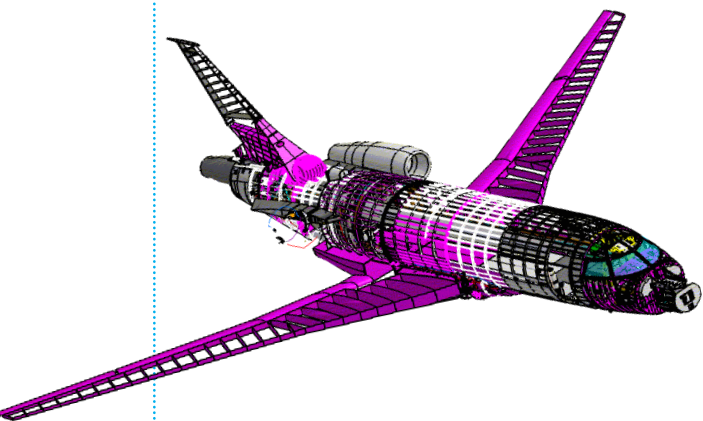
Le Product Lifecycle Management (PLM)





Années 2000 :

La maquette numérique permet le pilotage des projets et la coordination de l'ensemble des activités de conception





Années 2000 :

La rationalisation des processus



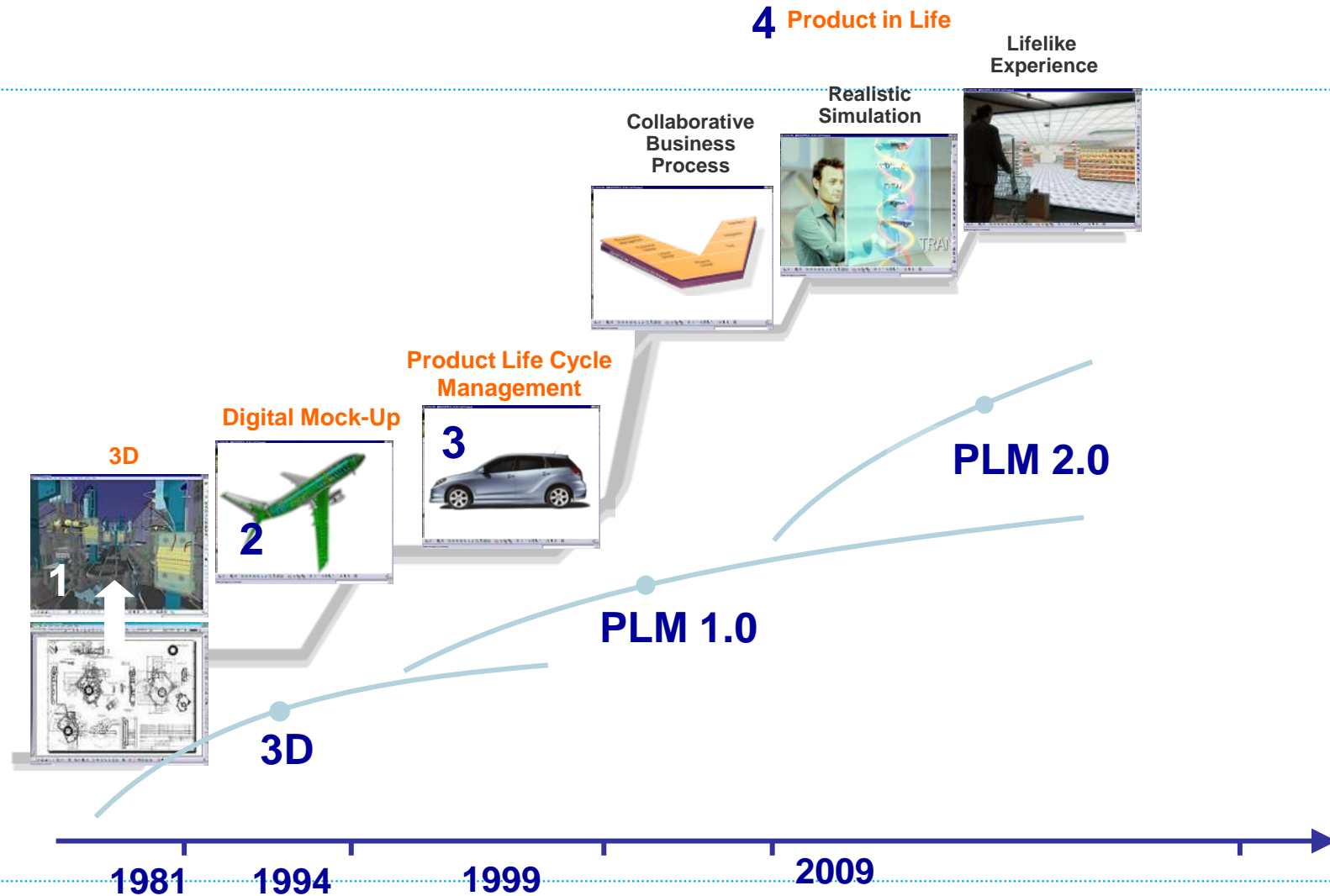
3. Le modèle d'innovation de Dassault Systemes



Un leader de l'industrie du logiciel

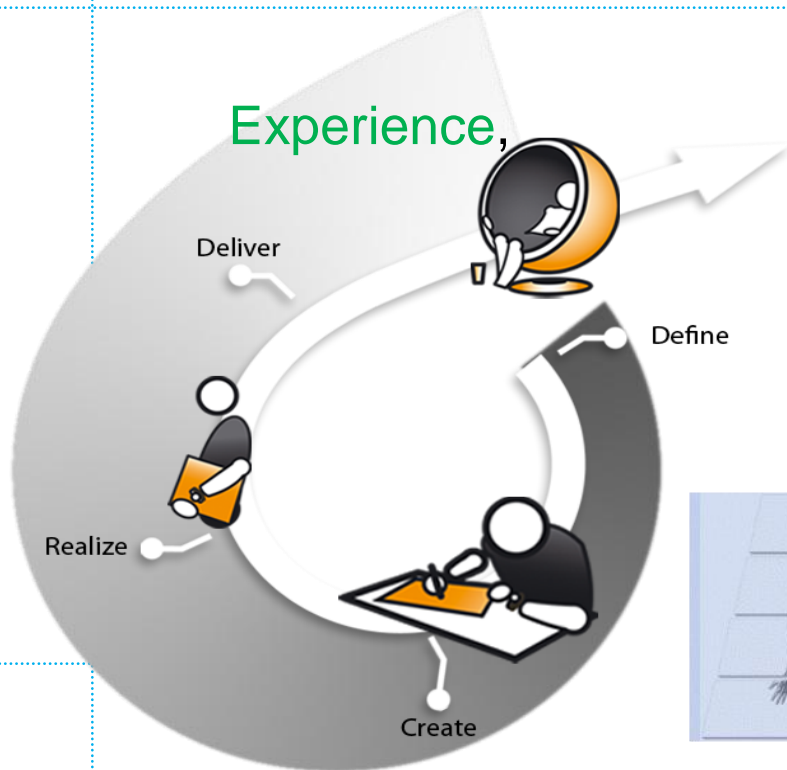
Revenus	Employés	Marché	Clients	Ecosystem
<ul style="list-style-type: none">• \$4B '09 revenue end-user (\$2B net)• 1996-2009 revenue growth: 18% per year• 25% of revenue reinvested in R&D• Unique business model with 58% recurring revenue	<ul style="list-style-type: none">• 10,000 employees• 82 nationalities• 153 sites in 27 countries• 18 R&D labs• 43% of employees work in R&D• 80% of employees have a Master's degree	<ul style="list-style-type: none">• PLM Leader• 25% market share: +10 pts in last 5 years• Unique V6 technology• 6 brands:<ul style="list-style-type: none">• SolidWorks• CATIA• DELMIA• ENOVIA• SIMULIA• 3DVIA	<ul style="list-style-type: none">• 150,000 Customers• 11 industries• 2 Million Users	<ul style="list-style-type: none">• 3,500 Partners• 160 SW development partners; Sales Partners• Services and Consulting Partners

28 ans de transformation industrielle



Notre Proposition de Valeur

Transformation fondée sur la digitalisation des actifs industriels




Imagine | Play

Lifelike Experience

Governance
Global Sourcing
IP Lifecycle Management
Unified Live Collaboration

Collaborative Innovation

iPLM®

Virtual Design

Systems
Shape
Mechanical
Equipments

Realistic Simulation

Compliance
Multiphysics Digital Lab
Open Scientific Platform

Digital Manufacturing & Production

Manufacturing Planning
Plant & Resources Eng.
Program & Control Eng.
Production Execution

CATIA

SIMULIA

DELIA

Nos marchés

En partenariat avec les grands industriels mondiaux

81

84

90

95

'00

'00

'05

'05

'06

'07

'08

Aerospace

Automotive

Ship

Industrial Equipment

High Tech

Architecture Construction

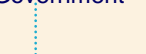
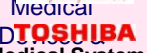
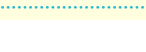
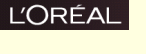
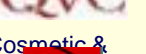
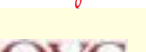
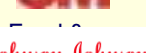
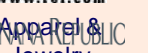
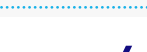
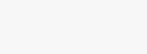
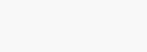
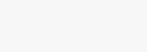
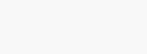
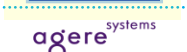
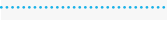
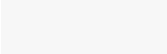
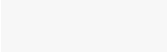
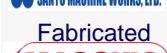
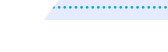
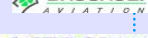
Consumer Goods

Consumer Packaged Goods

Life Sciences

Energy

Services



4. Des nouvelles perspectives: la modélisation des imaginaires au service de l'innovation & la création



