



Workshop
Business Strategy for CoLi
14th of June 2016

Dr. Christian Dugast

Learning curve

General :

https://en.wikipedia.org/wiki/Learning_curve

Psychology:

http://www.intropsych.com/ch07_cognition/learning_curve.html

Plot :

[Plotting real experience](#)

NASA

<http://fas.org/news/reference/calc/learn.htm>

Research / Software Industry

Pareto Principle

Research / Software Industry

Pareto Principle

Research = 80% of the conceptual work

Industry = 20% of the conceptual work

What does Software Industry?

It makes it working

→ industry needs 80% of the total energy to run it

Why so?

See the learning curve

Why so?

See the learning curve

Research gave an idea ...

... with no experience on need

Why so?

See the learning curve

Business is a complex Multi-Dimensional space that has to:

- master the technology
- handle usability
- process the change function
- find and position a solution
- scale the solution
- market and sell it

Why so?

See the learning curve

Business is a complex Multi-Dimensional space that has to:

- master the technology
- handle usability
- process the change function
- find and position a solution
- scale the solution
- market and sell it

unknown

Example from
the business world



Business basic references

Michael Porter:

[generic strategies](#)

[Books](#)

Pip Coburn

[The Change Function](#)

Steve Blank

[The Startup Manual](#)

<https://steveblank.com/>

What is
a nice to have
Vs
a need technology?



Needs

Vs

Nice

Core Business

There is no other solution

I can produce something new

I can produce more with less costs

That's it!

I can save time

I can improve my processes

Supportive

All the rest you can think about

Some nice to have can become needed technologies:

e.g. mobile phones

What are the conditions
of success for nice to have
technologies?



User, usability and ... usage of tools

User

Constraints

- Task to be solved
- Keeps focus
- Controls Quality of task solving
- Know-how

Resources

- Muscles
- IQ / Brain
- Knowledge

Tools / Computer

Constraints

- Efficiency, quality of software
- CPU Speed
- Input / Interfaces
- Memory space

Resources

- CPU power
- Software
- Memory

Usability of a nice to have: Making a Sauce Maltaise

Sauce Maltaise

Constraints

- Temperature
- Beat speed
- Emulsion speed
- Fine tuning at the end

Type of resources

- User & experience (learning curve)
- Tools

User Resources

- Muscles
- IQ / Brain
- Knowledge

Making the Sauce Maltaise

Tools number 1:

- Hand shaker
- Bowl

User takes care of

- Temperature
- Beat speed
- Emulsion speed

User load

- Muscles 80%
- IQ / Brain 20%

Tools Load: 0%

Frequency of usage

- Consumer: 1 a year
- Cook: 1 a week

Tools number 2

- Kitchen Machine

User takes care of

- Temperature
- Emulsion speed

User load

- Muscles 20%
- IQ / Brain 20%

Tools Load: 60%

Frequency of usage

- Consumer: 1 a quarter
- Cook: every day

Tools number 3

- Kitchen Machine
- Temperature regulator

User takes care of

- Emulsion speed
- Proportions
- Quality

User load

- Muscles 0%
- IQ / Brain 30%

Tools Load: 90%

Frequency of usage

- Consumer: 1 a month
- Cook: instantly

What is the market size?

Consumer

- Problem
 - Complexity

- Solution
 - Expensive
 - Still requires IQ

- No market

Cook

- Problem
 - Time
 - Concentration

- Solution
 - Creativity possible

- Niche market

The sauce Maltaise: Findings I

The solution for the consumer market:

An instant sauce

Even if quality and taste are far below the real sauce

The solution is **a no-brainer**

Nice to Haves markets: The no-brainer threshold

Success in nice to have markets
is based on
the ability to do things blindfold

- no muscle usage
- no brain usage
- no memory need

Speech Recognition a no-brainer?

- Not really
 - If I am surprised of the result
 - If I cannot be spontaneous in my expression
 - If it does not act like a human
 - Making as if ...

Where / How

- no human simulation → No Dialogues
- Very simple error corrections mechanism
 - Alternative lists
- Examples
 - SMS





Thank you

Dr. Christian Dugast