

BUSINESS OPPORTUNITIES IN STANDARDIZATION

A. De Min
Preon Capital Partners

Workshop on the processing of genomic information, Torino, 19 July 2017

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TWO FUNCTIONS

Innovative asset manager for the family office's liquidity and for external investors

Family office for the most successful business angel in Europe



JARI OVASKAINEN

OBJECTIVE

Develop a set of equity investment products with risk, return and liquidity profiles that are particularly suitable for family offices and long-term investors

MISSION

Continuously innovate methods and enhance productivity to decrease costs and maximize net returns for investors



A NEW CLASS OF EQUITY INVESTORS

Single-family (SFO) and multi-family (MFO) offices:

- Pioneered by the Rockfellers in late 1800
- Initially focusing on tax planning, property management, administration, payroll, etc
- Deeply transformed in last 20y with proliferation of millionaires/billionaires
- Today 3000+ SFOs globally
- 50% born in the last 20y
- \$4 trillion total wealth



New billionaire profile:

- entrepreneur
- sophisticated, value investor
- has extensive entrepreneurial network
- seeks long-term (next-generation) returns
- less demanding (more passive) than VC

SFOS, MFOS ARE THE EMERGING SOURCE OF VENTURE CAPITAL







DEFINITION OF A STANDARD

Standards provide people and organizations with a basis for mutual understanding, and are used as tools to facilitate communication, measurement, commerce and manufacturing





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FOR USERS / CONSUMERS

Advantages:

- enhance network effects
- attract consumers to new technology
- permit more informed product choices
- reduce product prices
- Increase speed and efficiency

Disadvantages:
• reduce variety

STANDARDS TRANSFORM PRODUCTS INTO COMMODITIES





FOR ENTREPRENEURS / INVESTORS

Advantages:

- facilitate business interaction
- enable companies to comply with laws and regulations
- speed up market introduction of innovative products
- provide interoperability between new and existing products, services and processes
- facilitates mix and match between components of a system

Disadvantages:

- increase competition
- Increase margin pressure
- increase regulatory burden
- impose frequent technology changes
- block technology evolution

IS THERE ANY REAL, LONG-TERM BUSINESS OPPORTUNITY FOR INVESTORS?



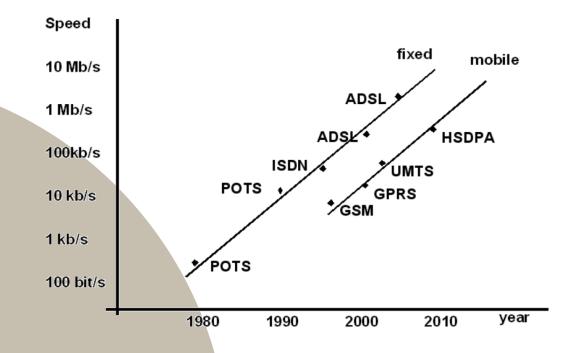


STANDARDIZATION AND TECHNOLOGY REVOLUTION

THREE CONDITIONS:

- a) Increase in performance
- b) Decrease in cost
- c) New standard





STANDARDS BRIDGE THE GAP BETWEEN RESEARCH AND MARKET



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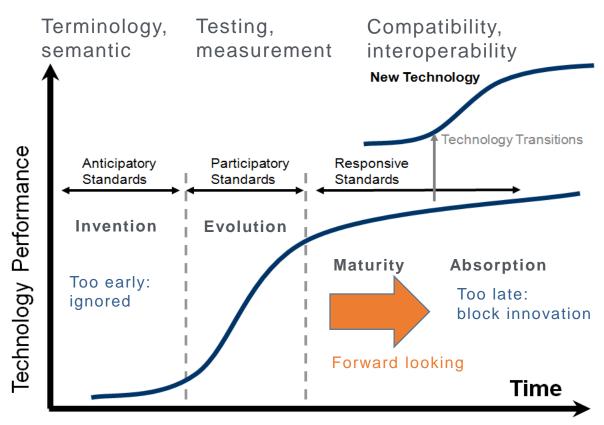
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SUCCESSFUL STANDARDS

TIMING AND EVOLUTION



Source: www.ifm.eng.cam.ac.uk/uploads/Resources/Reports/OSullivan_Dodin_Role_of_Standardisation_June_2012__2_.pdf





BUSINESS OPPORTUNITIES

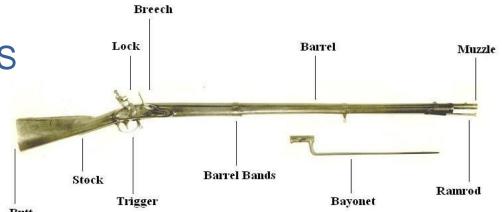
- A. IMPROVED, LOWER COST MANUFACTURING
 - MIX & MATCH OF STANDARD COMPONENTS
- B. DEVELOP PRODUCTS/SERVICES BASED ON A NEW STANDARD
 - BIRTH OF A NEW INDUSTRY
- C. INVEST IN RESEARCH THAT MAY GENERATE A STANDARD
 - IP ROYALTY REVENUE MODEL



A. IMPROVED, LOWER COST MANUFACTURING

THE ADVENT OF INTERCHANGEABLE PARTS

- In early 18th century gun making was an extremely skilled craft
- Every gun was unique, expensive to produce, difficult to repair
- In mid 18th century Honoré LeBlanc introduced standard parts
- Parts are simple, identical, interchangeable
- New guns required unskilled labour. They were cheap to produce and repair

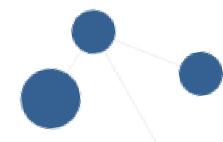


LEBLANC'S INVENTION WAS IGNORED IN FRANCE

- Revisited by Eli Whitney (1798) in US
- Used by US against France in the quasi-war
- Whitney's craft company was bought by Samuel Colt...

Benefit to the entrepreneur: $\sqrt{}$







B. DEVELOP SERVICES BASED ON A NEW STANDARD

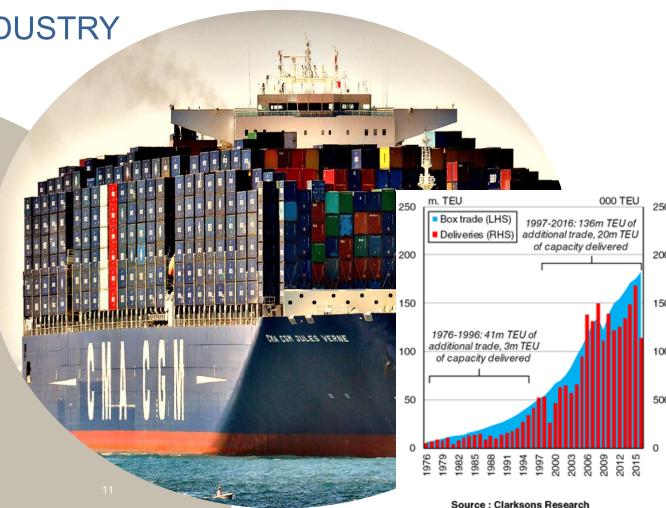
THE CONTAINERS "NEW" INDUSTRY

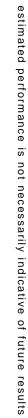
Before 1950 bulk-break cargo was loaded/unloaded one piece at a time With TEU standard cargo grouped into identical boxes:

- Shipping time reduced by 84%
- Shipping cost reduced by 35%
 The TEU standard has created a new industry, with enormous business opportunities, and boosted trade

Benefit to the user: \forall \forall \tag{\tag{Panefit to the entrepreneut}}

Benefit to the entrepreneur: $\sqrt{}$







C. INVEST IN RESEARCH THAT MAY GENERATE A STANDARD

THE technicolor 3USINESS CASE

Former Thomson, Thomson Multimedia Active in all tech fields (A,B,C above) but focus is in tech IP (MPEG, HEVC, etc.)

Today owns 40k patents from 6k inventions Royalties from IP licences:

- EUR 290M or 6% of sales
- 35% of EBITDA
- 70% margin

Benefit to the user:√√

Benefit to the entrepreneur: $\sqrt{\sqrt{\sqrt{1}}}$

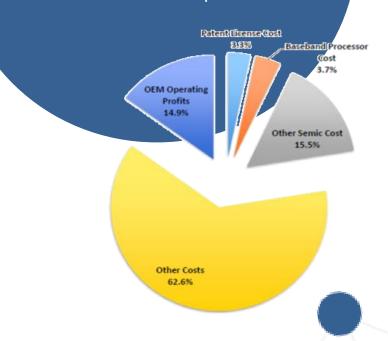
(*) Source: http://hooverip2.org/wp-content/uploads/ip2-wp16011-paper.pdf

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Mobile phones patent yield:

A recent study^(*) indicates:

- 32 licensors
- \$14b/y royalties
- 3.3% on mobile shipment sales



^(**) Source: Bloomberg



A STANDARD FOR GENOME SEQUENCING?

DEVELOPMENT STAGE?

Technology is mature Entering Genomics 2.0 (or mass-market) era

WHICH TYPE OF STANDARD?

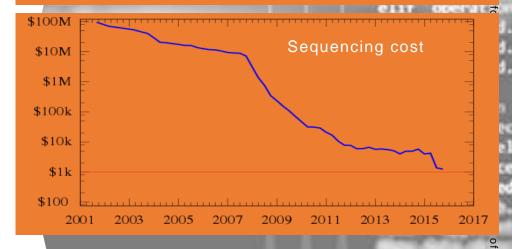
Need a responsive standard Fostering "compatibility and interoperability"

WHICH TECHNOLOGY?

Still at the dawn of a new science Need a forward-looking standard Beyond compression performance, random access and privacy issues should be key element

> TIMING SEEMS TO BE RIGHT AMAZING OPPORTUNITY TO DEFINE THE LANGUAGE OF A NEW SCIENCE

Web 2.0 (2004) describes WWW websites that emphasize user-generated content, usability, and interoperability for end-users. It describes the transition from an academic, research-driven usage to a universal, mass usage of the internet. It emphasizes facility of data exchange via the development of universal interfaces ("Standards")









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