Where does growth come from? And what happens to it?

Prof. Clayton M. Christensen
Harvard Business School
Different types of innovations play specific roles in the growth of companies and economies.

1. Products with potential to get jobs done
2. Sustaining innovations
3. Efficiency Innovations
4. Disruptive, market-creating innovations
Most potentially successful innovations focus on a job that people need to do.

“The customer rarely buys what the company thinks it is selling him.”  - Peter Drucker
I need to get this to there as fast as possible, with perfect certainty.
What is the situation I am in?

How will customers choose us instead of others?

How will we provide the experiences required to get the job done?

How can each person know which product does the job best?

Purpose

Brands: How brands are built

What and how to integrate?

What experiences in purchase and use must we provide to do the job perfectly?

The job I need to do, given the situation I am in.

(Each job has functional, emotional, and social dimensions)
A purpose brand is one that “pops” into our minds when we realize that we have a specific job to do.

IKEA
TurboTax
QuickBooks
Disney
Mayo Clinic
Zara
OnStar
Hilti
Intermountain Health Care

Harvard
Milwaukee HoleHog
Milwaukee Sawzall
Chicago Cubs
V-8
Lunchables
LandRover
Rigid tools
Jack Bauer

A purpose brand acts as a two-faced compass. It tells customers what to expect from the product, and it tells marketers and engineers what features and functions they should and should not incorporate in their product.
Sustaining Innovations: Make good products better

- Competing against consumption
  - 40% on $2,000
  - 60% on $500,000

- Competing against non-consumption
  - 45% on $250,000
  - 40% → 20% on $2,000

- Pace of performance improvement
- Ability to use improvements
Efficiency Innovations
Market-creation (disruption) innovations

The metric of performance changes

Tabletop Radios, Floor-standing TVs

Path taken for transistors by vacuum tube manufacturers

Portable TVs

Pocket radios

Hearing Aids

Time

Performance

Non-consuming or non-consuming occasions

The customers are enticed into the new system, not *vice versa*.
The future of electric cars

Competing on cost, design, reliability, and performance on the California Freeway

Tesla $100,000

Prius Hybrid

Are there customers that would love a car that won’t go far, and won’t go fast?
Understanding the jobs that surrounding us needing to be done, helps us grow:

1. It helps us compete against real non-consumption, instead of the aspirations of those that have developed only the technology.

2. Non-consumers are delighted by simple solutions – because their prior option was no product or service at all.

3. Standards, cultural habits and regulations that create barriers against an incumbent, typically are organized around consumption, not non-consumption.
After hitting bottom, how long before companies started hiring again?

Recessions that started in years 1949, 53, 60, 69, 75, 81 (average) 6 months

1991-1992 15 months
2001-2002 39 months
2007-2008 71 months

Something has gone wrong.
Sustaining innovations make good products better

Focus of management
- Improve margins; gain market share
- Creates less and less net growth

A manager’s view of growth

Jobs to be done that are not addressed

Disruptive Innovations
make products affordable and accessible
• Creates growth
• Creates jobs
• Needs capital

Efficiency Innovations
Eliminates jobs
Increases free cash flow
Sustaining innovations make good products better

Focus of management
- Improve margins; gain market share
- Creates less and less net growth

1. Abundance and scarcity

Jobs to be done that are not addressed

2. Profitability (RONA, IRR) is better than profit ($)

Disruptive Innovations
make products affordable and accessible
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- Creates jobs
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Efficiency Innovations
Eliminates jobs
Increases free cash flow
Key doctrines in the financial view of corporate prosperity:

1. Abundance and scarcity

2. Profitability (RONA, IRR) is better than profit ($)

Disruptive Innovations

Sustaining Innovations

Efficiency Innovations
Today corporate pensions account for 70% of shareholdings. They are required, from operating cash flows or from capital appreciation, to fund their pension liabilities.

Because of the mis-match between the supply and demand for capital, the returns to capital are plunging to zero or negative.

Pension funds that a decade ago had been fully funded, now have become un-funded.

Corporations now must compel their investment managers to invest more and more of their funds in companies that pay off in the short term, with predictable returns.

A powerful industry of consulting & private equity firms has emerged to service the need for more free cash flow.

This is The Capitalist’s Dilemma.
Capital superabundance:

“The growth rate of the real economy of goods and services has been slowing in recent decades, while growth in the financial sector has been accelerating. Bain estimates that total financial assets are today almost 10 times the value of the global output of all goods and services, and that the development of financial sectors in emerging economies will cause global capital to expand by half again by 2020. We are awash in capital”

A World Awash in Money: Capital Trends through 2020, Bain & Company

The cost of capital is approximately zero.

We struggle to invest it.

Banks and monetary policy are becoming less useful.
Roots of Growth

• America
  – Isaac Singer’s sewing machine
  – Henry Ford’s Model T
  – Emerson’s electric motor
  – Intel’s microprocessor

• Japan
  – Toyota’s three-wheel delivery machine
  – Sony’s transistor pocket radio
  – Honda’s cub
  – Canon’s printer
Development of Resource-Based Economies

Disruptive Innovations
Create corporate and economic growth.
Create jobs
Need capital

Sustaining Innovations
Focus of management
Sustain margins
Create little net growth

Efficiency Innovations
Eliminate jobs
Increase free cash flow

A manager’s view of growth

Mexico, Nigeria
Competing against non-consumption of refrigeration

Many more can own & use refrigeration.

More people start new businesses that are enabled by refrigeration.

Peltier-Effect refrigeration

Hire more to make them.

And to sell them.

And be distributors.
Market-Creating Innovation and Growth:

By Koreans for Koreans

Kia BUZZ

1980

1974

1986

2008

2010

1962

Rebar

Kia busses

1980
Air conditioners for Mormon missionaries, Pusan, 1960s

SamSung SmartPhone, 2010

SamSung Air Conditioner, 1970s
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Competing against non-consumption of refrigeration
M-Pesa

By Vodafone

M for mobile
Pesa for Money (Swahili)

Kenya, Tanzania
Afghanistan
South Africa
India
Eastern Europe

2007
Kenya,
Tanzania
Different types of innovations play roles in the growth of companies and economies

- Growth economies
  - India
  - Kenya
  - Viet Nam

- Potential economies
  - Pakistan
  - Ghana
  - Venezuela

- Sustaining economies
  - Korea
  - China
  - Chile

- Efficiency economies:
  - Japan
  - Western Europe

- USA
How can a company continue to grow?

A successful business unit, with its business model, is predestined to pass through these three stages. It cannot reverse this trajectory, to create growth again.

Corporate-level investments and M&A in disruptive technologies & business models can create new growth.
Changes in the Demand and Supply of Capital

The amount of capital
Un-invested capital or over-funded projects and acquisitions

Attractive projects and acquisitions that plausibly promise >15 - 25% returns

Good ideas that were unfunded

These are not temporary phenomena.
Capital superabundance:

• “The growth rate of the real economy of goods and services has been slowing in recent decades, while growth in the financial sector has been accelerating. Bain estimates that total financial assets are today almost 10 times the value of the global output of all goods and services, and that the development of financial sectors in emerging economies will cause global capital to expand by half again by 2020. We are awash in capital”

  *A World Awash in Money: Capital Trends through 2020, Bain & Company*

• Cost of capital is approximately zero

• We struggle to invest it.

• Banks and monetary policy are becoming to be useless.
We need to re-think finance

• We are awash in capital
  – This is not a temporary phenomenon

• Cost of capital is nearly zero
  – Ex ante hopes vs. ex post reality for capital
  – We can crowd-source capital (Circle Up)

• Banking is becoming irrelevant
  – Deposits and loans are unprofitable
  – Non-banks can offer other services cheaper and better
  – Loans and equity are not the only instruments for the emerging world
  – Micro-lending is moving up-market

• Central banks’ monetary policies have little traction
  – The interest rate is irrelevant to investment choice
Government Policy and the Invisible Hand

• The Capitalist’s Dilemma has obviated Monetary Policy.

• We are in a new situation
  Akin trying to filling the ocean with a firehose
  The system responds by driving the velocity of money towards zero. Not one. Zero.
  Tax incentives only work when the return on capital is significantly positive.

• Venture capital is subject to the same metrics: RONA, IRR, NPV. It is the Capitalist’s Dilemma.
The right product architecture depends upon the basis of competition

- **Proprietary, interdependent architectures**
  - Compete by improving functionality & reliability

- **Modular open architectures**
  - Compete by improving speed, responsiveness and customization

Dell PCs
## Tolaram Noodles in Nigeria

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>Started by importing Indomie Instant Noodles from Pakistan.</td>
<td>GDP / capita was $256.</td>
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<tr>
<td>1995</td>
<td>Purchased factory.</td>
<td>Life expectancy 46 yrs.</td>
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<tr>
<td>2001</td>
<td>Bought competitor that was publicly traded, to create scale.</td>
<td>GDP / capita was $350.</td>
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<tr>
<td>2008-12</td>
<td>Opened a seasoning plant, a palm oil plant and a flour manufacturing plant. Bought trucking company for reliable distribution.</td>
<td></td>
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<tr>
<td>2016</td>
<td>$800 million in revenues. Building the largest port in West Africa. Pays $100 million in taxes to the Nigerian government. Employs &gt;100,000 people. In contrast, the Nigerian oil industry employs 65,000.</td>
<td></td>
</tr>
</tbody>
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Examples of Market-Creating Innovations

Japan: cars, motorcycles, consumer electronics
Korea: cars, appliances
Taiwan: bicycles; disruptive business model in microelectronics
Singapore: disk drives
China: appliances, routers
India: refrigeration, hospitals, scientific instruments
Chile: fresh fruit
Kenya: M-pesa