

# Motorola Transformation in Face of Global Change

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**MOTOROLA**

Motorola, Inc. – an Overview

Heritage of Innovation

Wireless Industry Turmoil

Change Management - Performance Excellence

Turning a New Page – Motorola Solutions, Inc.

Q&A

# Motorola, Inc.

## An Overview





Ensure Clear Messaging Regardless of Who You Are



# SOLUTIONS FOR CONSUMERS, ENTERPRISES AND GOVERNMENTS



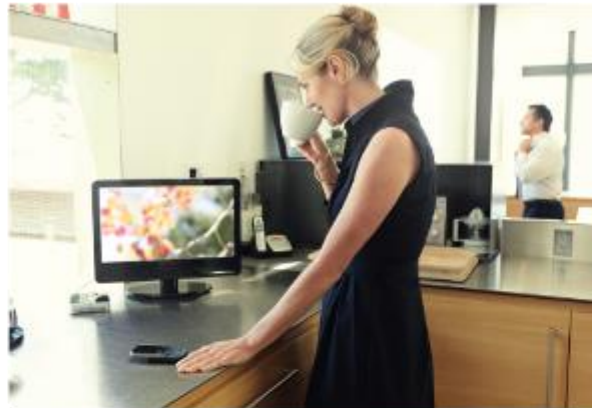
**WE SAVE LIVES!**





Enhancing consumers mobile keipi experiences





Combining cable television, telecom and wireless services



Delivering solutions to wireless and wireline operators  
- “KDDI, Softbank & NTT DoCoMo”





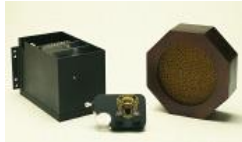
Delivering end-to-end, mission critical and enterprise solutions

# MOTOROLA'S HERITAGE - CONTINUOUS INNOVATION



**1928**

**Company founded**



**1930**

**Motorola police radio**



**1936**

**Police Cruiser radio receiver**



**1940**

**Handie-Talkie AM portable two-way radio**



**1943**

**1<sup>st</sup> FM portable two-way radio**



**1956**

**Handie-Talkie pager**



**1969**

**1<sup>st</sup> words from moon by Motorola radio**



**1973**

**1<sup>st</sup> prototype portable cellular**



**1980**

**1<sup>st</sup> handheld laser barcode scanner**



**1983**

**LS7000 handheld laser scanner**



**1983**

**1<sup>st</sup> commercial portable cellular phone (weighted 794g)**



**1986**

**Invented the Six Sigma quality process**



**1991**

**PDF417 two-dimensional symbology**



**1991**

**1<sup>st</sup> GSM cellular system & 1<sup>st</sup> dual-mode cellular phone**



**1994**

**iDEN<sup>®</sup> integrated voice dispatch, paging, data & cellular**



**1995**

**1<sup>st</sup> two-way pager**



**2000**

**700 MHz mission-critical wireless data**



**2004**

**U.S. National Medal of Technology**



**2004**

**Iconic RAZR V3 wireless phone introduced**



**2005**

**MOTOMESH<sup>™</sup> broadband radio networks**



**2008**

**World's 1<sup>st</sup> WiMAX 802.16e mobile handoffs**



**2008**

**1<sup>st</sup> LTE 700 MHz data demonstration (CDMA to LTE network handoff)**



**2009**

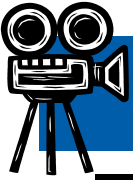
**Motorola DROID #1 on Time's Top Ten of 2009**



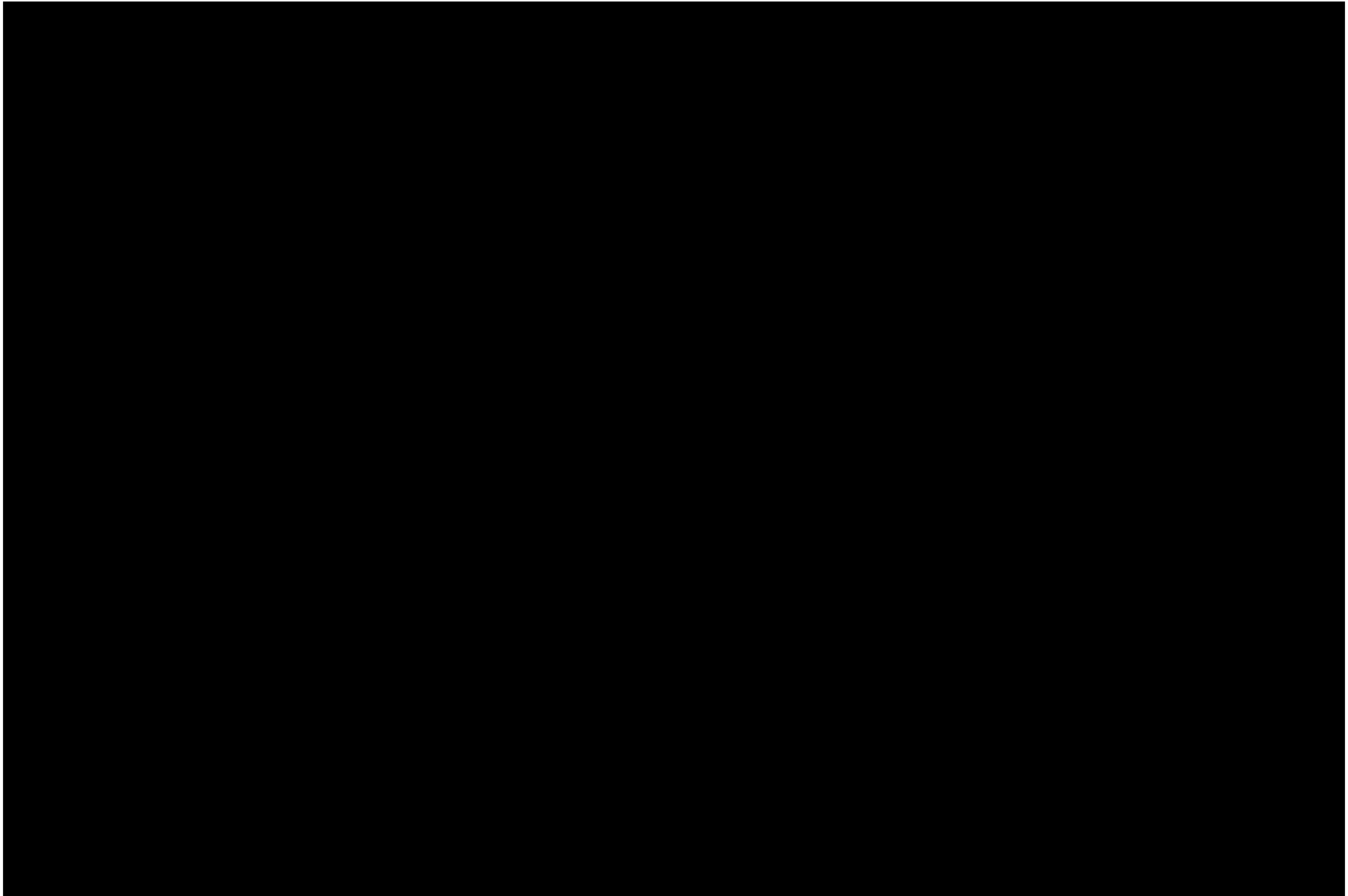
**2010**

**ES400 global enterprise digital assistant**





# “Motorola: Heritage of Innovation” Video





	1928	2008
<b>Where</b>	<b>Chicago</b>	<b>Global</b>
<b>Patents owned</b>	<b>1</b>	<b>~ 23,000</b>
<b>Product lines</b>	<b>Single</b>	<b>Multiple</b>
<b>Working capital</b>	<b>\$565</b>	<b>~ \$31 billion</b>

Patents are key to long term survival capabilities





- **Constant innovation is a requirement for survivability**
  - **Technical**
  - **Commercial**
  - **Financial**
  - **Motorola has survived by constantly innovating new products and services since 1928**
  - **BUT – be careful – know your strength and sell down assets quickly where you are not the volume leader – Motorola is now mainly a government radio system provider!**
- **The product lifecycle is short in technology**
  - **A requirement to innovate, become the industry volume leader and “milk” the asset for further innovation**
  - **Motorola has had a “mixed” bag of results**
  - **We will show an example “Networks” - and what we did wrong and what we got right!**

Never to let go your core competencies!

# GSM / UMTS Product Life Cycles

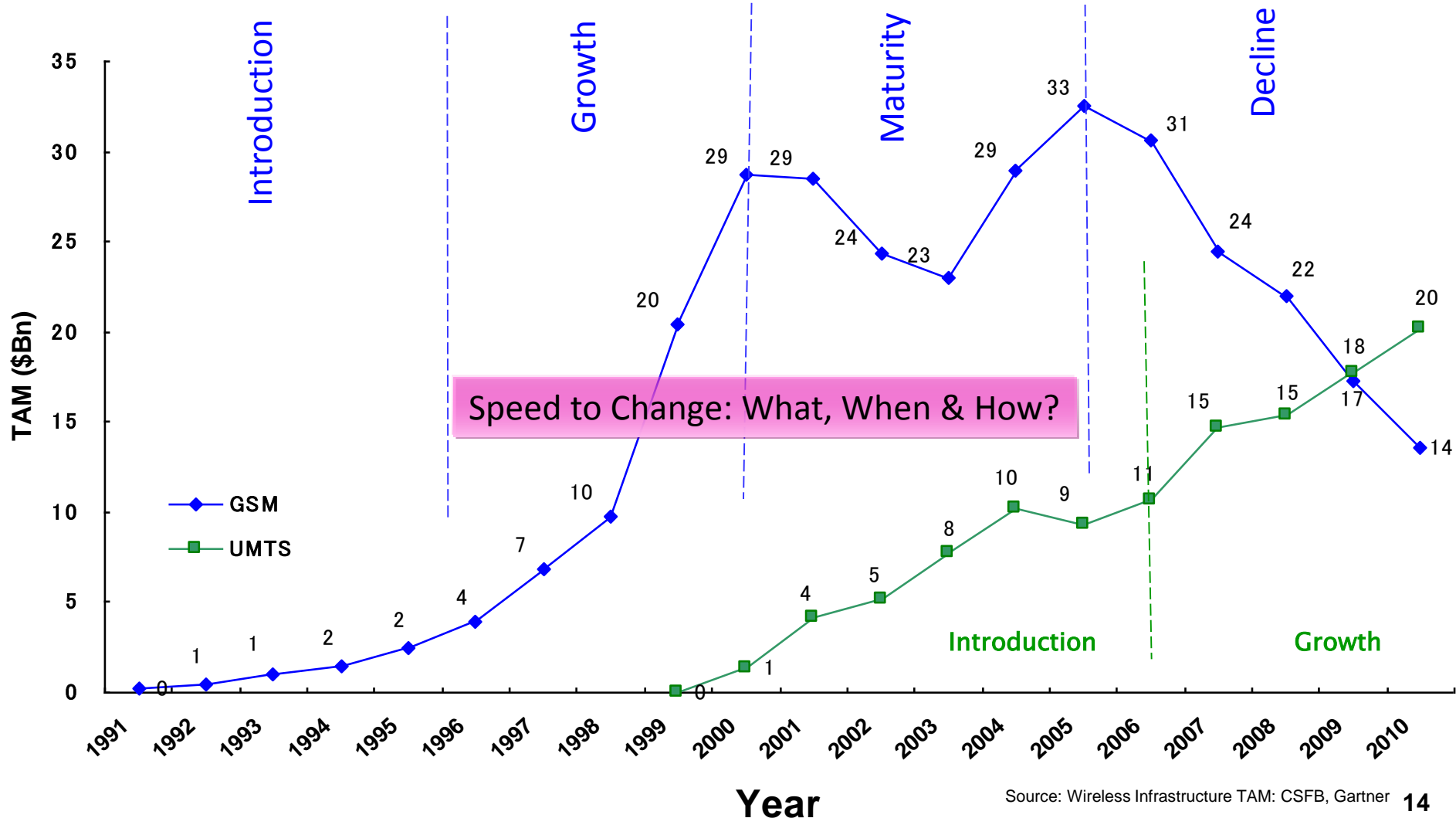


- Sales grow slowly
- High production costs
- Penetration pricing
- Create awareness

- Sales grow at an increasing rate
- Many competitors
- Difference between brands
- Profit peaks

- Sales continue to increase but at a decreasing rate
- Competition intensifies

- A long-run drop in sales
- Falling demand forces competitors out
- consumer tastes change or substitute product appears

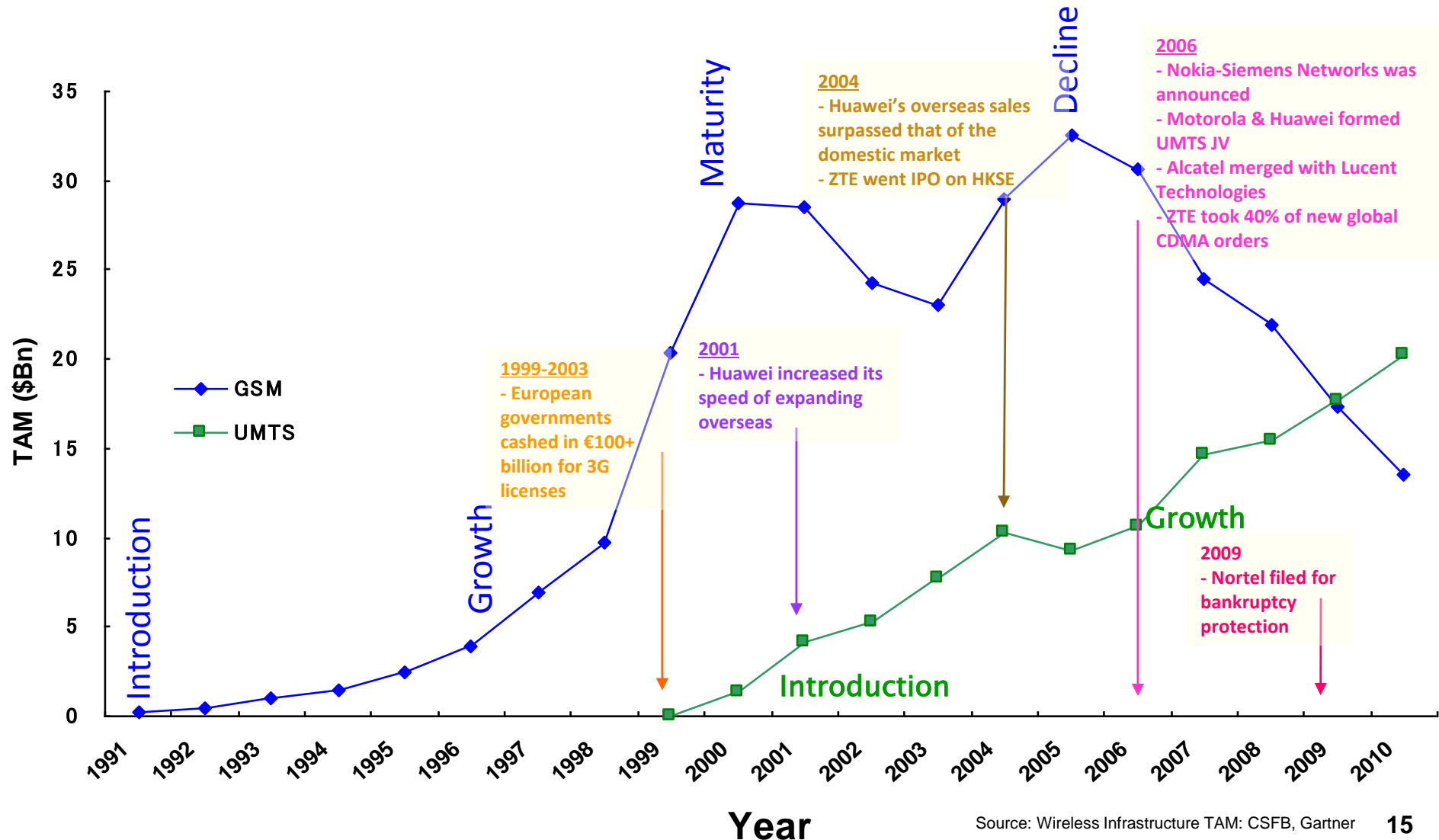




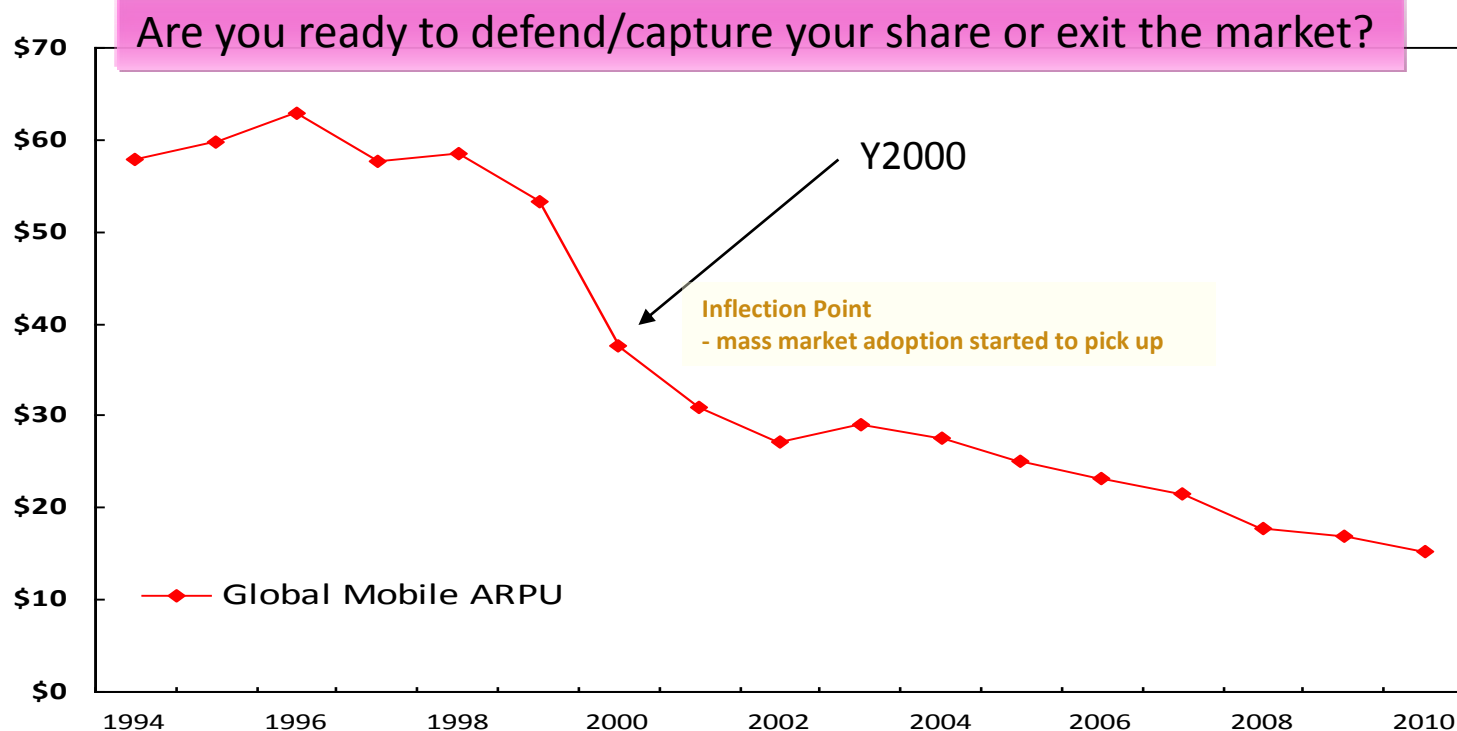
# Wireless Infrastructure Key Happenings



Watch out for even the unlikely competitors – the Game Changers!



# ARPU on a Downward Trend since Y2000



Highest operator ARPU by region, 1Q09

Region	Country	Operator	Blended ARPU (US\$)
Africa	Angola	Unitel	24.5
Americas	Puerto Rico	Centennial de Puerto Rico	65.00
Asia Pacific	Bangladesh	TM International Bangladesh	65.22
E. Europe	Slovak Rep	Orange	29.43
W. Europe	France	Bouygues Telecom	52.59
Middle East	Kuwait	Zain	52.00
USA/Canada	USA	Centennial Wireless	74.00

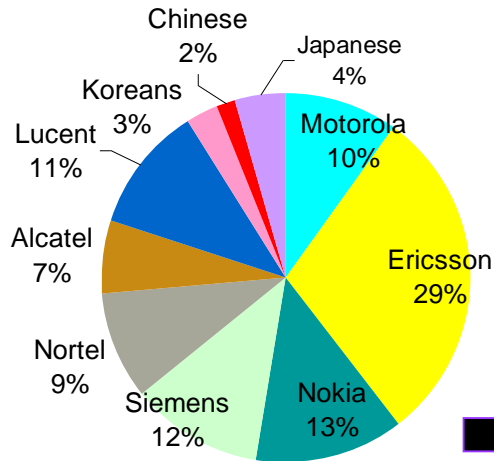
Lowest ARPU by operator, 1Q09

Region	Country	Operator	Blended ARPU (US\$)
Asia Pacific	Indonesia	Hutchison CP Telecommunications	0.90
Asia Pacific	Pakistan	CMPak	1.5
Asia Pacific	Sri Lanka	Hutchison (Hutch)	1.53
Asia Pacific	Pakistan	Warid Telecom Pakistan	1.90
Asia Pacific	Indonesia	Telkom (Telkom Flexi)	2.07
Asia Pacific	Pakistan	PTML (Ufone)	2.10
Asia Pacific	Bangladesh	PBTL (Citycell)	2.20

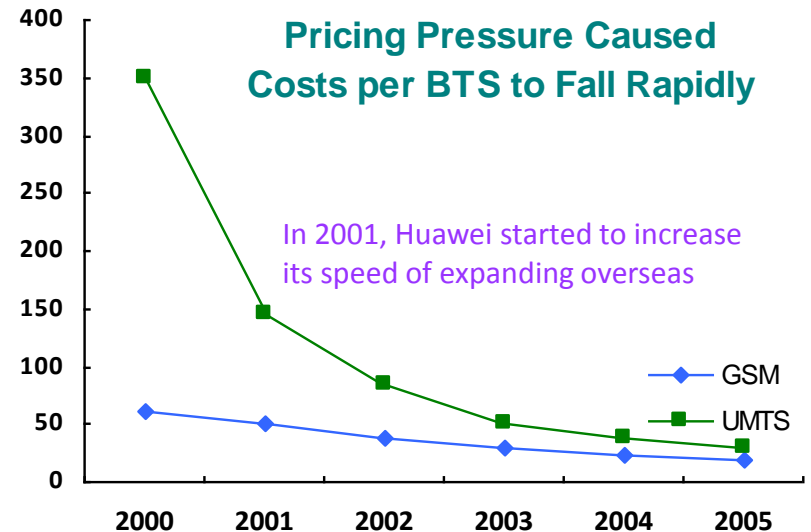
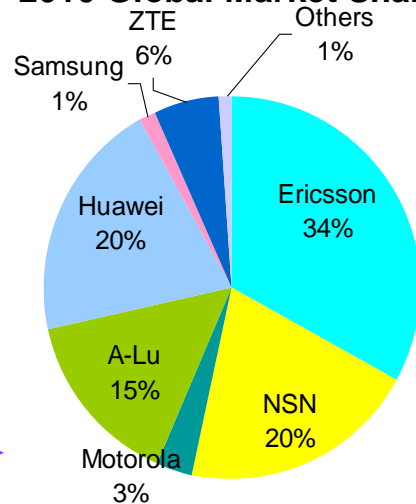
# How to Survive in a Severe Changing and Competitive Environment?



**2002 Global Market Share**



**2010 Global Market Share**



Source: Gartner, Dell'Oro

Source: Credit Suisse

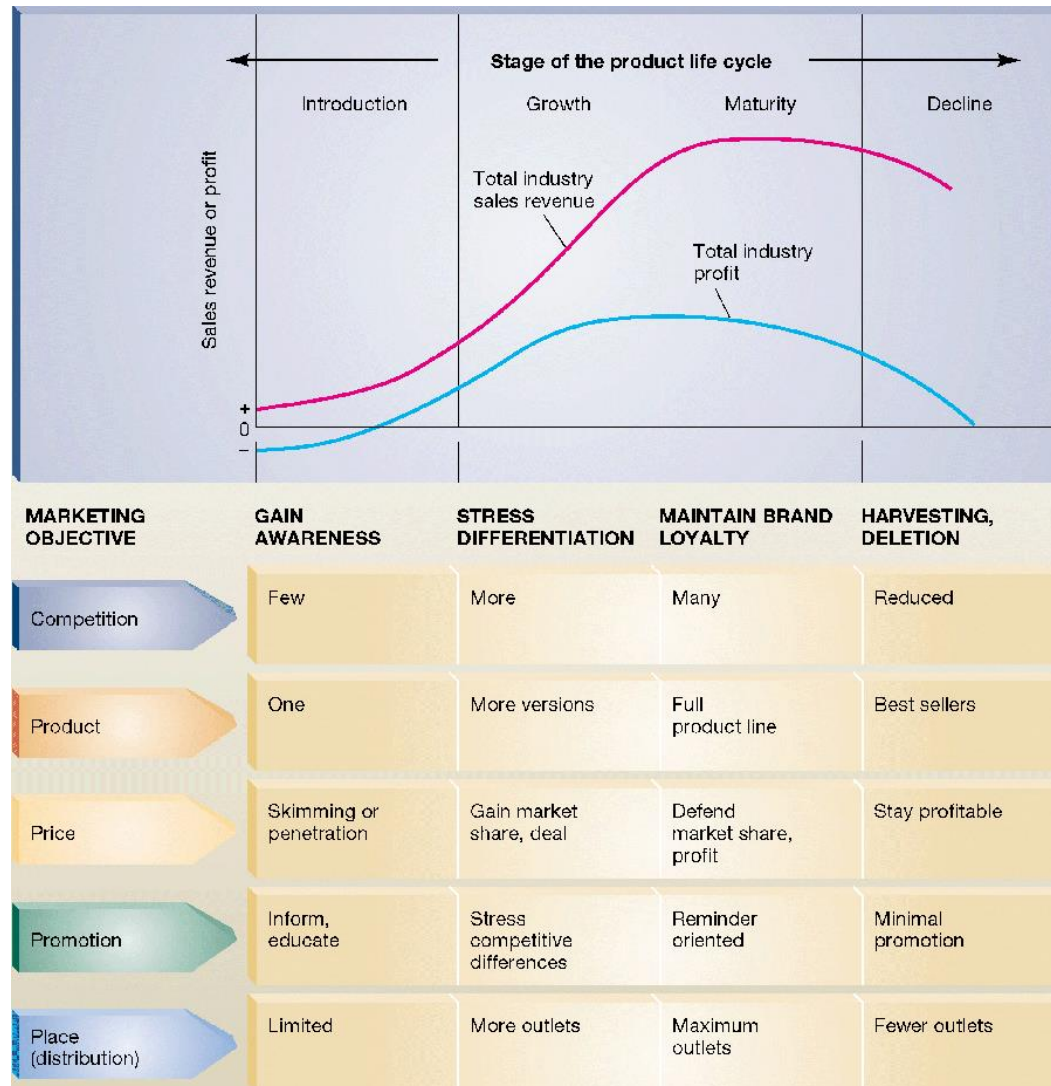
- **Chinese vendors, the late entrants, gained share by cutting price and upset the market**
  - 3G auctions and the economic downturn make the Chinese vendors become more appealing
  - An early CDMA market leader, Motorola started to lose shares to the low cost Chinese players in emerging markets
- **Market leader like Ericsson has the scale to assert its influence on the market agenda**
  - Not supported by all vendors, CDMA is not adopted widely
  - WiMAX did not generate enough momentum despite its initial success
  - Motorola's advocate of Leapfrogging to LTE from GSM/UMTS was not popular
- **The wireless market consolidates from over a dozen of players to 5 key ones by 2010**



# Lesson Learnt from the Product Life Cycle



## 1C + 4Ps for Speedy Decisions





- **Plan and position to be the volume / technical leader early on!**
  - Innovation is key!
  - Buy the market for growth!
  - Start taking profits at maturity
  - Fund your next innovation with decline
  - **Motorola got this wrong in the Networks Business**
    - We did not innovate quick enough to digital
    - We did not “buy” the market in the growth phase – we took profit too early on
    - We could not fund incremental innovation in networks – a sustainable business
- **The product lifecycle is short in technology**
  - From 1 to 2 innovators
  - To many competitors in the growth phase
  - To 3 volume leaders in maturity – only the big ones survive in the mature cycle

# SEPARATION – Jan 4, 2011



## Rationale:

Speed to changing to protect your CORE

- Unique customer segments, products and sales cycles
- Grow shareholder value
- Increase strategic flexibility
- Stronger management & operational focus

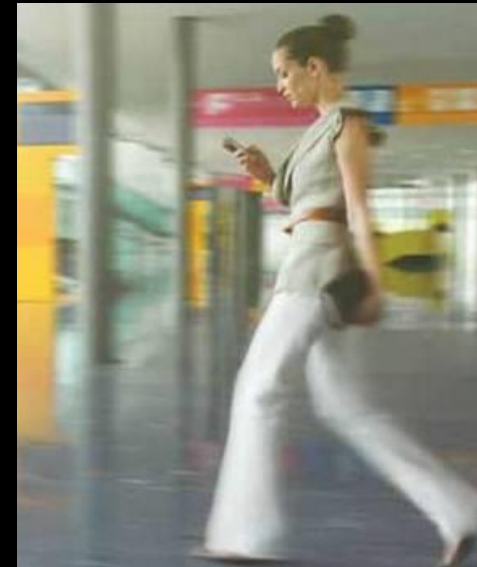
Stock price on Jan 3: \$63.77 (MOT)

Stock price on Jan 4: \$39.77 (MSI) + \$33.12 (MMI) = \$72.89 **(+14.3%)**



## MOTOROLA SOLUTIONS

Enterprise Mobility & Networks – enterprise focus  
NYSE: MSI



## MOTOROLA MOBILITY

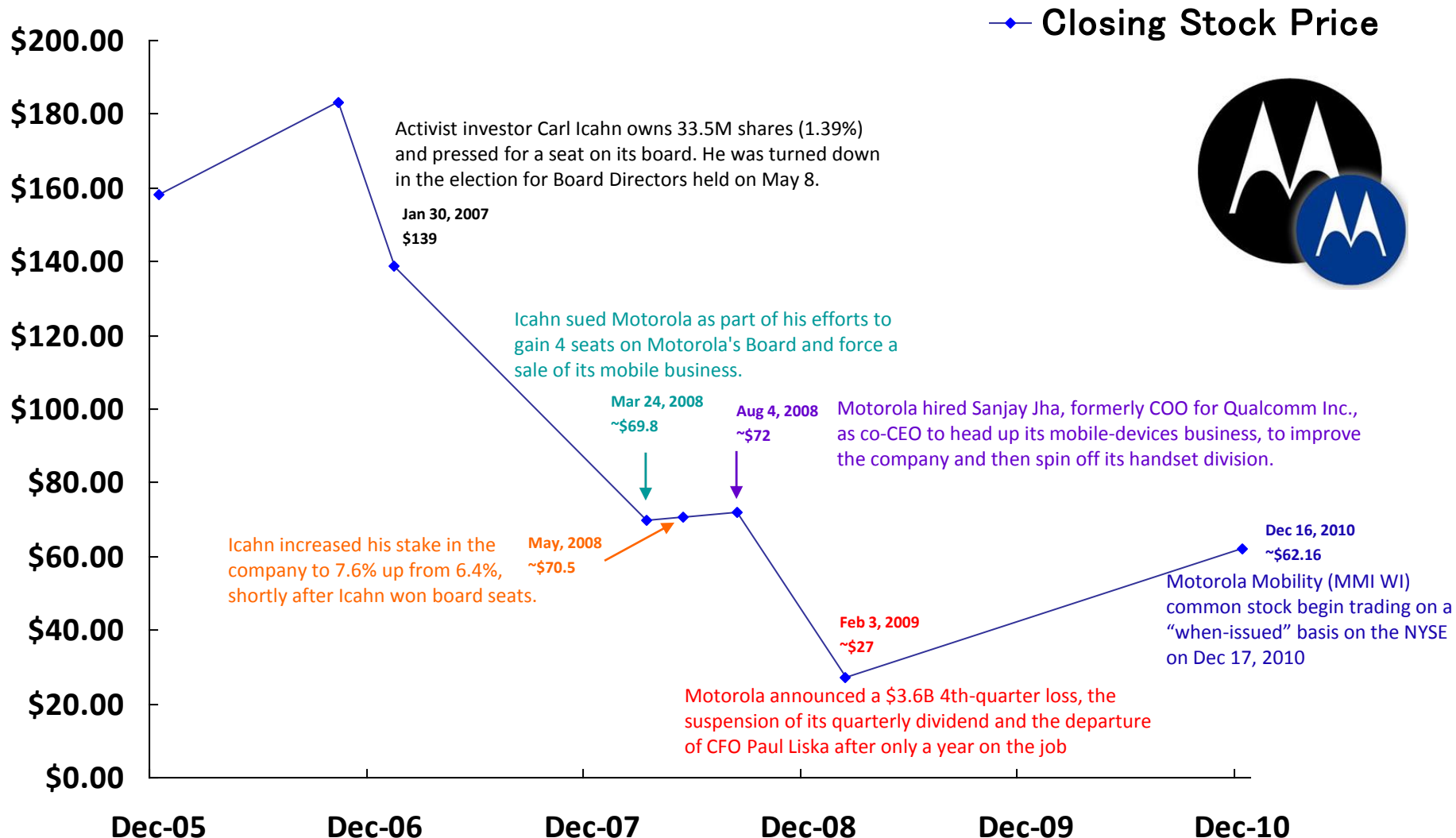
Mobile Devices & Home – consumer focus  
NYSE: MMI



# Events Leading up to the Spilt of Motorola



Motorola's innovation and change slowing down...





- **Investors punished Motorola for having three segments at different stages of the product life cycle**
  - **Mature government customers and technology – income play.**
  - **Non scalable networks business – problematic**
  - **Early innovation cycle – mobile device consumer business – growth and market share play**
- **Investors rewarded Motorola for taking action**



- **The Perfect Partners ~ 2006 – July 2010**

- Motorola and Huawei combined their UMTS portfolios in a joint venture to split R&D costs and boost Motorola's 3G market share

*“This agreement enhances our technological innovation while also creating cost savings for our business.”*

~ Greg Brown, President, Networks & Enterprise, Motorola

*“Due to its technology leadership, abundant experience in mobile and valuable relationships with customers around the world, Motorola is the perfect research and development partner for Huawei...”*

~ Zhang Shunmao, President, Wireless Product, Huawei

- In April 2010, Huawei, who intend to purchase Motorola's Networks business, worked on mitigating U.S government's concerns about its ties with China's People's Liberation Army
- Despite Huawei's effort and a higher offer, Nokia Siemens Networks (NSN) beat Huawei in buying the Motorola unit for \$1.2 billion on July 19

Change and choose your exit partner carefully ...





- **The Lawsuits ~ 2008 to 2011**

- Motorola sued Huawei and 13 former employees for conspiring to steal its wireless trade secrets and proprietary technology starting in 2001
  - The lawsuit was originally filed in 2008 against former Motorola engineers and Lemko
  - On July 16, 2010, Motorola filed a new complaint against Huawei alleging an elaborate plot to steal trade secrets via a front company, Lemko
  - Huawei said the lawsuit was groundless
- On Jan 24, 2011, Huawei sued Motorola to block its sales to NSN and to stop Motorola employees and information associated with its UMTS and GSM equipment businesses from being transferred to NSN



- **The Resolution ~ April 13, 2011**
  - Huawei agreed to withdraw its lawsuit against Motorola and NSN...In return, Huawei will receive an undisclosed amount of money from Motorola to transfer its commercial agreements with Huawei
  - Motorola agreed to dismiss a claim against Huawei
- **The Sale Completes ~ April 30, 2011**
  - Following China's approval, NSN finally closed its \$975M purchase of Motorola's network infrastructure assets
    - 50 operator customers in 52 countries
    - access to a new customer base and a foothold in North America and Japan
    - 6,900 ex-Motorola employees
    - Motorola's solutions portfolio: GSM, CDMA, WCDMA, WiMAX and LTE
    - R&D facilities in the US, China, Russia, India and the UK

# 1Q 2010 Key Networks Financial Performance Metrics



(3 months ending March 2010, excluding restructuring charges)

1Q10	YoY Sales Growth	Gross Margin	Below Gross Margin Costs	Operating Earnings
Alcatel-Lucent (consolidated)	(10%)	33%	R&D 18% SG&A 21%	(6%)
Alvarion	(14%)	43%	R&D 21% SG&A 18%	(8%)
Ericsson (consolidated)	(9%)	39%	R&D 16% SG&A 13%	10%
Huawei—full yr. 2009 (consolidated)	19%	40%	R&D 9% SG&A 17%	14%
Nokia-Siemens Networks (segment)	(9%)	31%	R&D 17% SG&A 13%	1%
Samsung (Telecom—largely mobile devices)	5%	Not reported	Not reported	12%
ZTE (consolidated)	14% 1% (carrier networks)	Not reported	R&D 9% SG&A not reported	0.3%
Motorola Networks	(7%)	Not reported	Not reported	14%

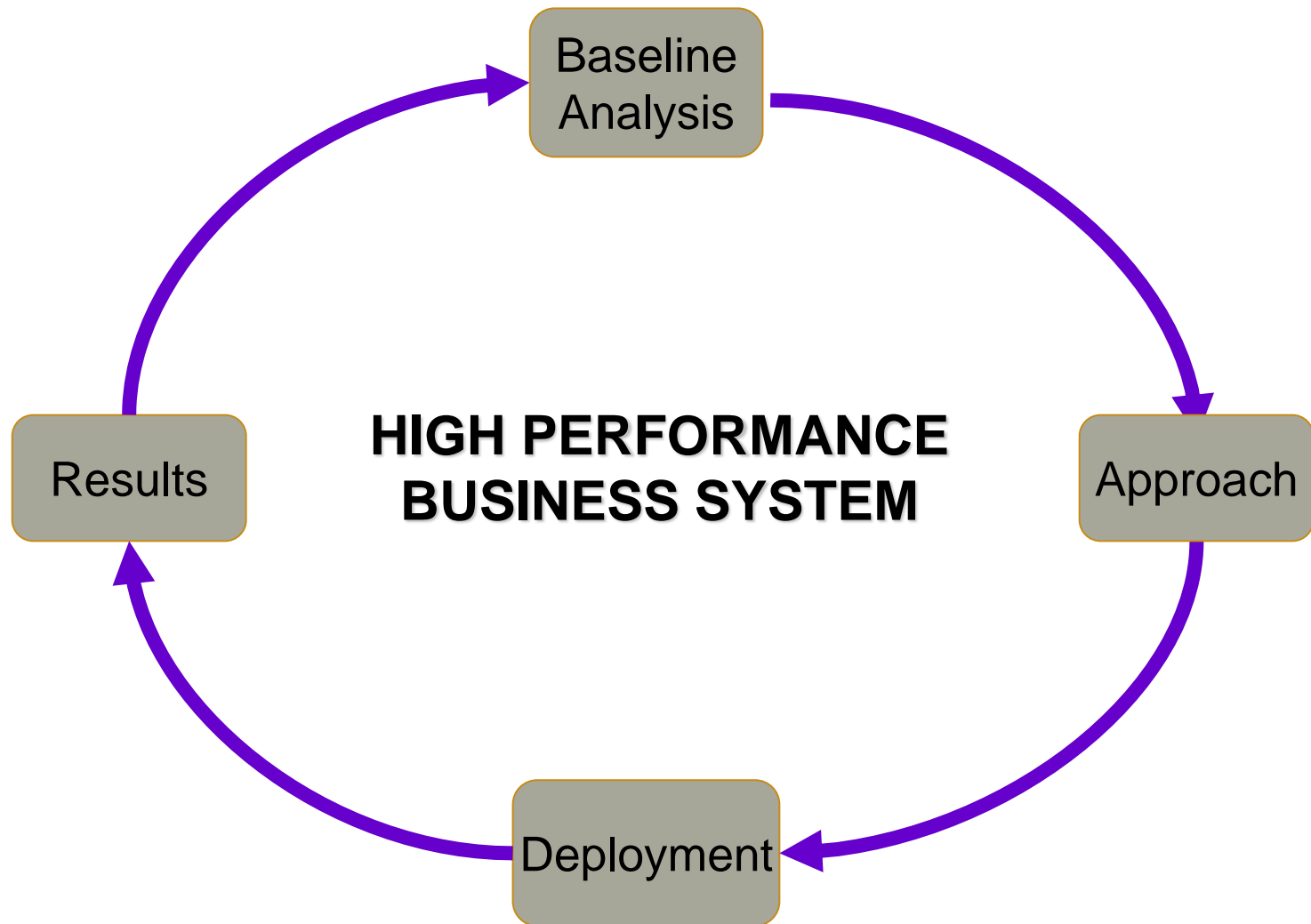
• Growth better than all non-Asian vendors

• Best-in-class OE  
• AP Q1 OE: 16.8% or 62% of total Networks OE



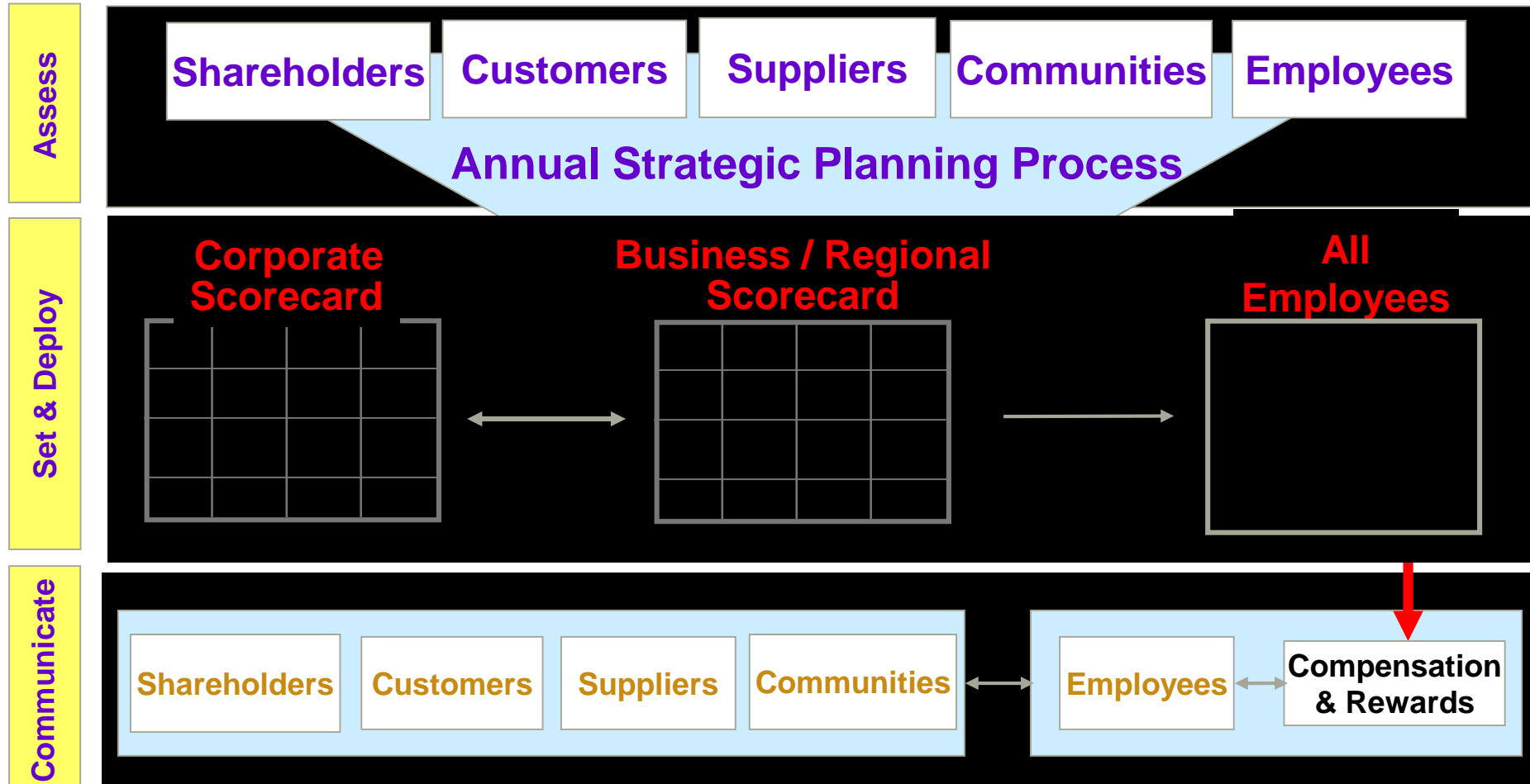


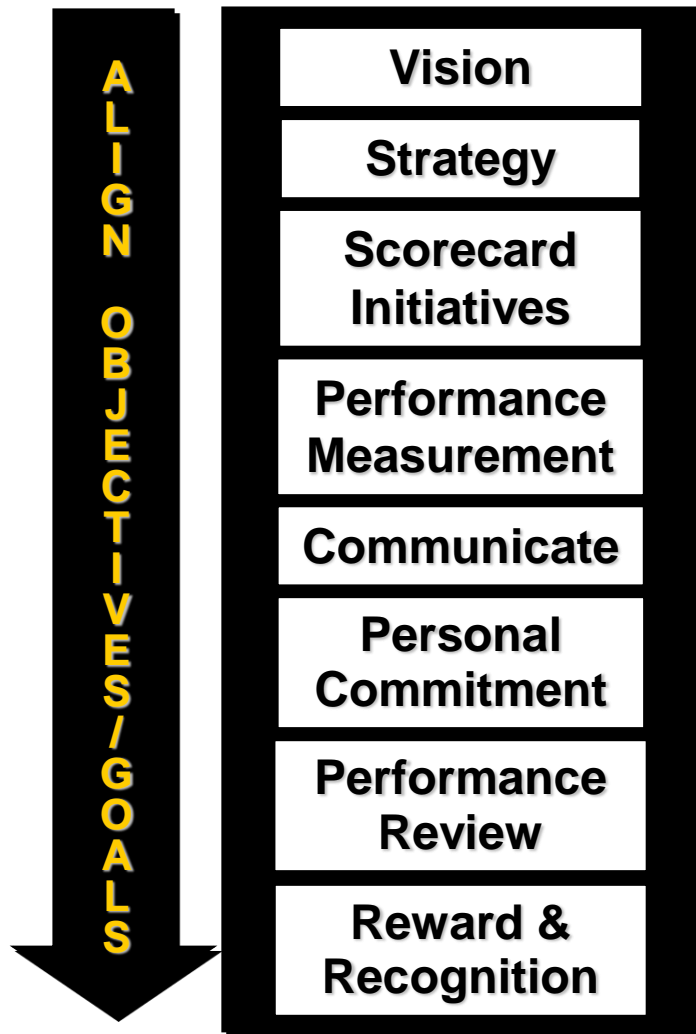
- **Get volume and scale quickly after initial innovation**
  - Or partner / acquire / divest
  - Motorola networks partnered, then divested!
  - But did not chose their partners carefully or wisely!
- **As industries move to maturity where only 3 will survive – balanced market share and profitability**
  - Partner / divest / acquire one of the three!
- **Plan your partnership carefully with clear exit criteria**



# Leadership

## Creating & Balancing Value for Stakeholders





- Strategy creates Performance Excellence Scorecard initiatives
- Scorecards cascaded throughout the organization
- Organizational and individual goals aligned through Personal Commitment
- Reward and Recognition directly linked to Scorecard Results



- **Understand your core strength**
- **Protect your core strength**
- **Leverage and grow your core strength**
- **Adapt your core strength to Market Dynamics through:**
  - **Intuition**
  - **Innovation**
  - **Understanding of the inflection points**
- **Don't be a victim of your own success!**

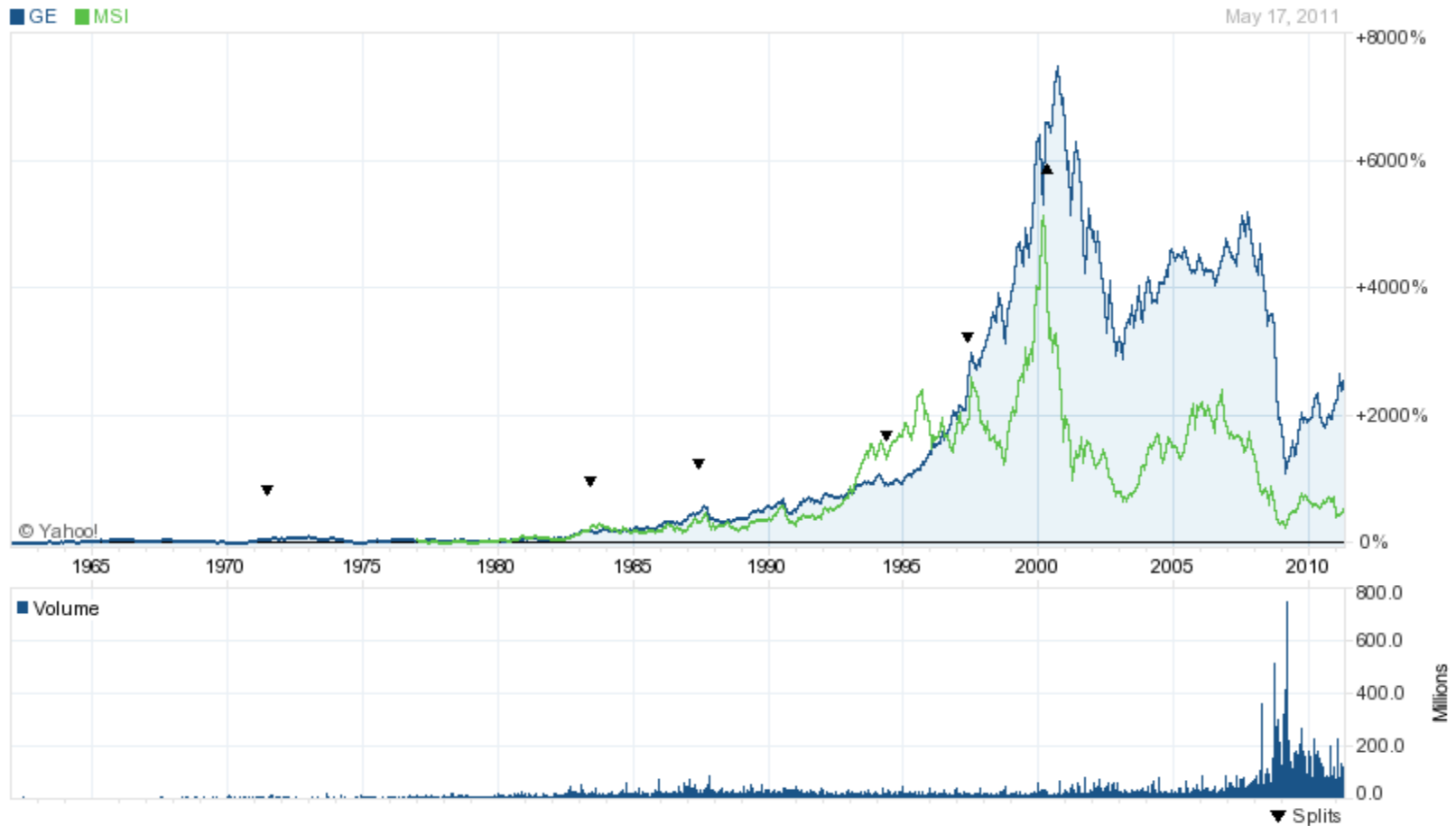


# Turning a New Page, or Returning to it's Root ...?

Motorola Solutions, Inc.

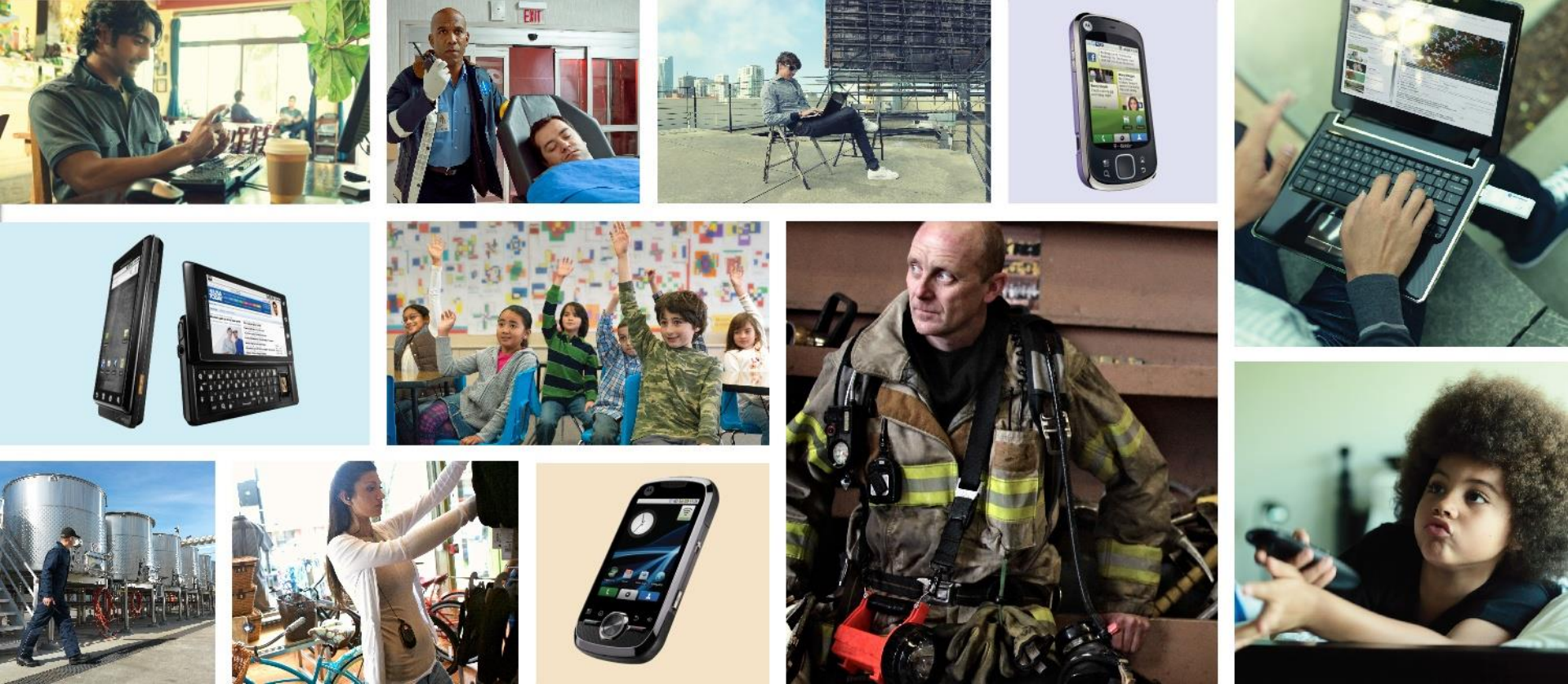


# Motorola vs. General Electric Stock Price



# Q&A





# THANK YOU



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