IPSG investor day reference slides

HP Investor Relations
April 4, 2005

Protecting the core

WW inkjet market share

WW SF inkjet unit market share

	2003Q1	2003Q2	2003Q3	2003Q4	2004Q1	2004Q2	2004Q3	2004Q4
HP	41.6%	39.2%	41.1%	37.9%	37.2%	35.9%	37.1%	30.6%
Lexmark	10.4%	12.3%	13.2%	13.8%	13.3%	12.3%	11.7%	14.6%
Dell	0.0%	0.0%	0.4%	0.6%	0.5%	0.1%	5.4%	4.0%

WW AiO unit market share

	2003Q1	2003Q2	2003Q3	2003Q4	2004Q1	2004Q2	2004Q3	2004Q4
HP	54.0%	54.3%	53.0%	52.3%	50.5%	45.9%	48.6%	49.7%
Lexmark	27.3%	21.7%	23.2%	19.9%	16.5%	20.2%	20.0%	17.5%
Dell	0.0%	5.3%	6.0%	7.2%	9.1%	10.2%	9.2%	7.3%

Dell **HP** **Lexmark**

WW laserjet market share

WW mono laser unit market share

HP: 51.3% 51.7% 53.2% 49.8% 51.0% 48.9% 50.7% 47.1%

Lexmark: 7.3% 7.5% 6.0% 7.4% 5.8% 6.9% 5.9% 7.8%

Dell: 0.0% 0.6% 0.7% 0.8% 1.4% 2.1% 2.6% 2.4%

2003Q1 2003Q2 2003Q3 2003Q4 2004Q1 2004Q2 2004Q3 2004Q4

WW color laser market share

HP: 33.7% 39.6% 37.2% 38.9% 33.9% 41.0% 41.8% 38.4%

Lexmark: 3.6% 4.2% 3.6% 3.1% 3.2% 4.6% 3.4% 3.5%

Dell: 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.2% 3.8%

2003Q1 2003Q2 2003Q3 2003Q4 2004Q1 2004Q2 2004Q3 2004Q4
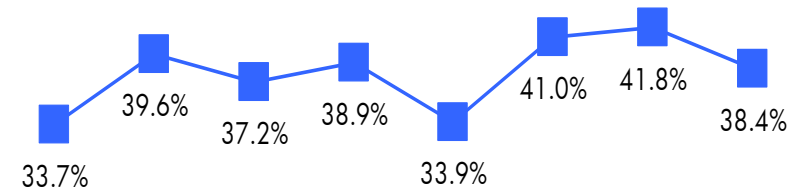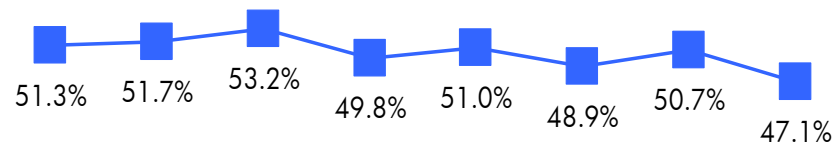
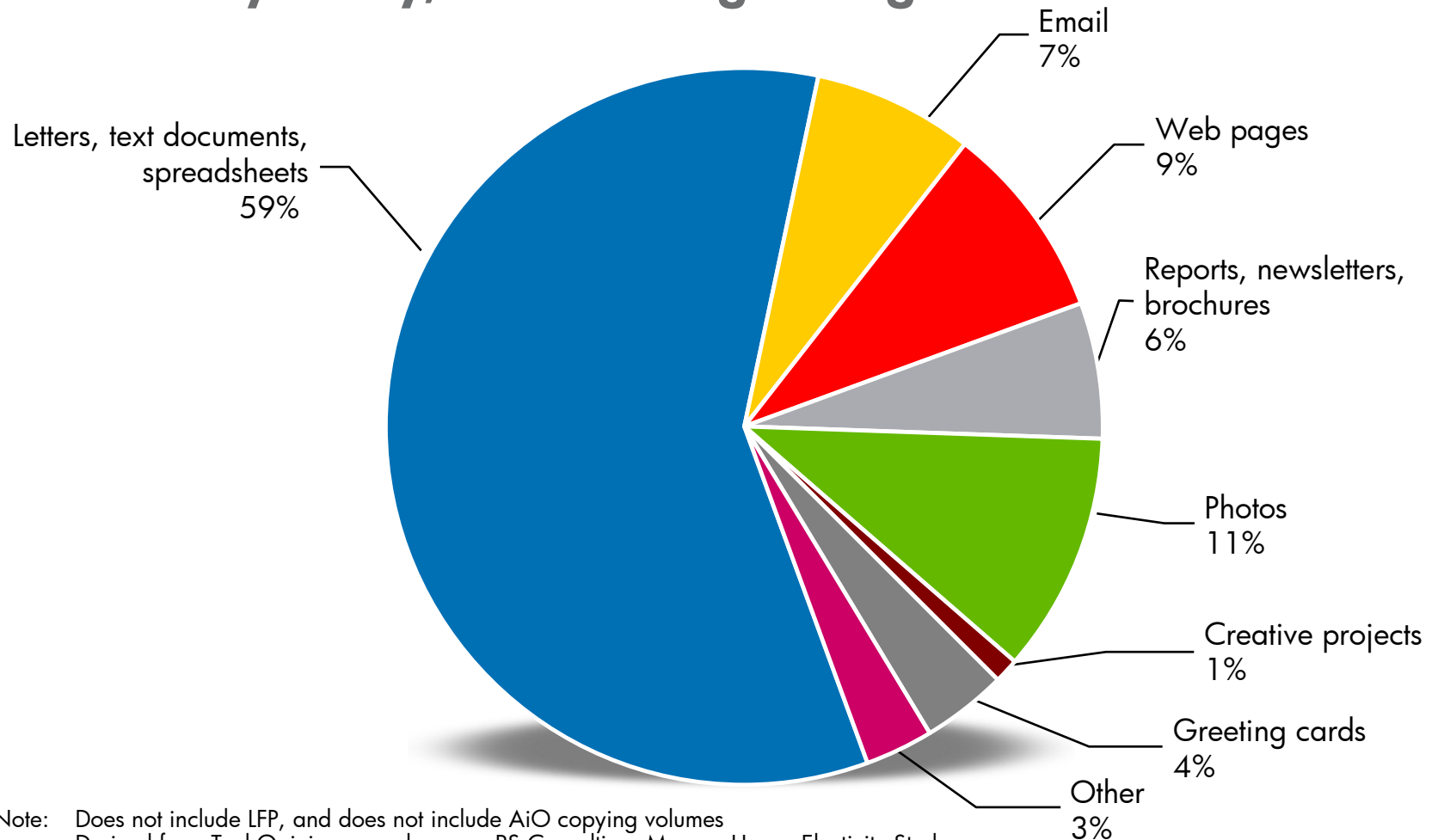Legend: Dell | HP | Lexmark

Source: IDC, 4Q04

Pricing and promotion actions

Note: The following is a representative sample of pricing actions in North America and not intended to be comprehensive

- 10-20% price drops in entry level AiOs (PSC 1315, 2355)
- Reduced prices in photosmart photo printers:
  - PS 7450 from $99 to $79
  - PS 7760 from $149 to $129
  - PS 8150 from $199 to $179
  - PS 8450 from $249 to $229
- Office Jet AiO 6210 cut from $299 to $199
- $50-100 instant rebates on entry level mono lasers
- $50-75 rebates on entry level CLJ 2550 (retail starting at $499)
- $100-120 rebates on CLJ 3550 series (retail starting at $699)
- $300-400 rebates on CLJ 3700 series (retail starting at $999)
- Further actions to include:
  - Additional price cuts on select office jets, AiOs and mid level photosmart photo printers
  - Additional instant and mail-in rebates

Consumer usage trends
Productivity is key, emotion is growing fast

Email
7%

Web pages
9%

Letters, text documents,
spreadsheets
59%

Reports, newsletters,
brochures
6%

Photos
11%

Creative projects
1%

Greeting cards
4%

Other
3%

Note: Does not include LFP, and does not include AiO copying volumes
         Derived from TechOpinions panel survey, RS Consulting, Magma Usage Elasticity Study,
         January 2004, K. Martin, et al., Usage Alignment: Ink Usage Insight April '03 – March '04, June 2004

SF mono laser unit growth projections

Emerging geographies – CAGR '03 – '07
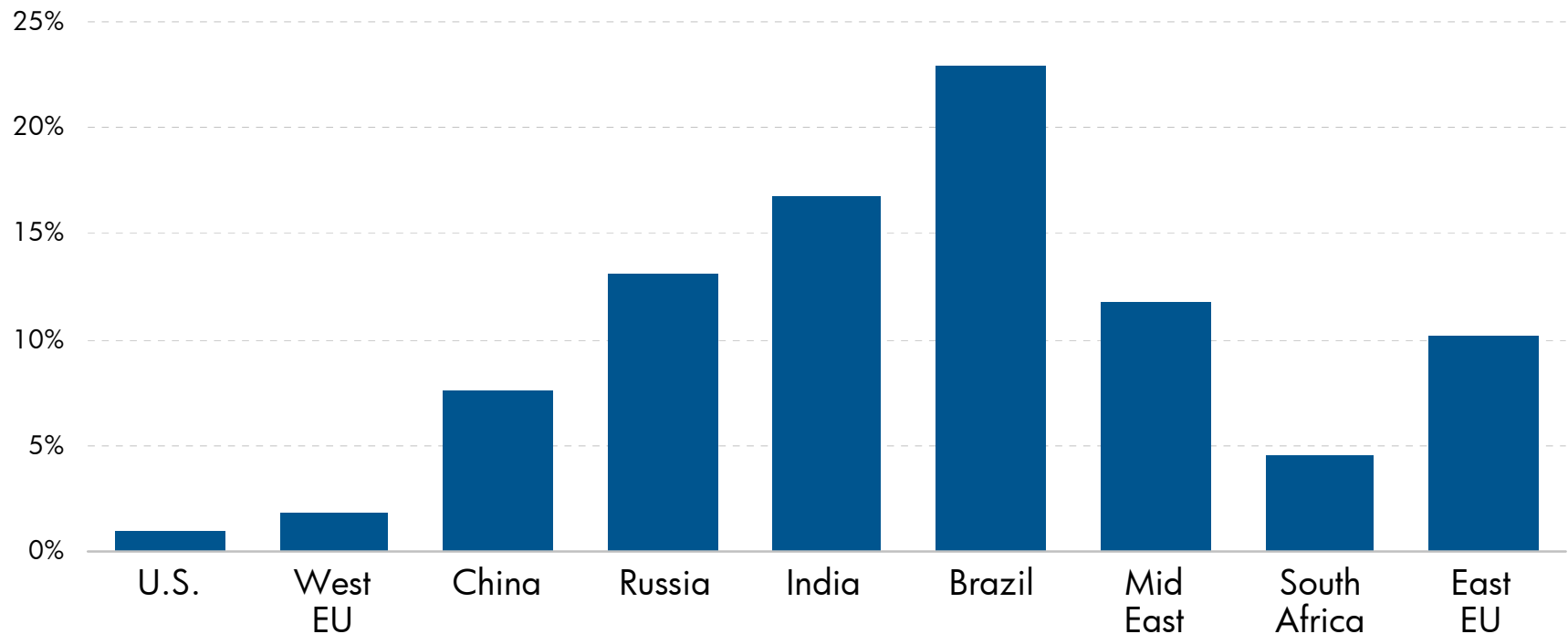
Source: IDC March 8, 2005

Crisp and effective competitive response

Aggressively defending our intellectual property

Recently filed two complaints against reman/refill industry
- LaserCycle (dba "InkCycle") for alleged patent infringement
- Rhinotek for alleged false and misleading packaging of refilled cartridges

Disproving competition's claims

- LaserJet study conducted in 2004 found that **CPP of Dell 1700 is 10% higher than HP** as compared to Dell's CPP claim of up to 35% less than HP's product
- IJ study conducted in 2004 found that average CPP of **Dell 922 is 3-8% higher – specifically 14% higher on black** and only 5% lower than HP on color as compared to Dell claim of CPP up to 64% less than HP's product
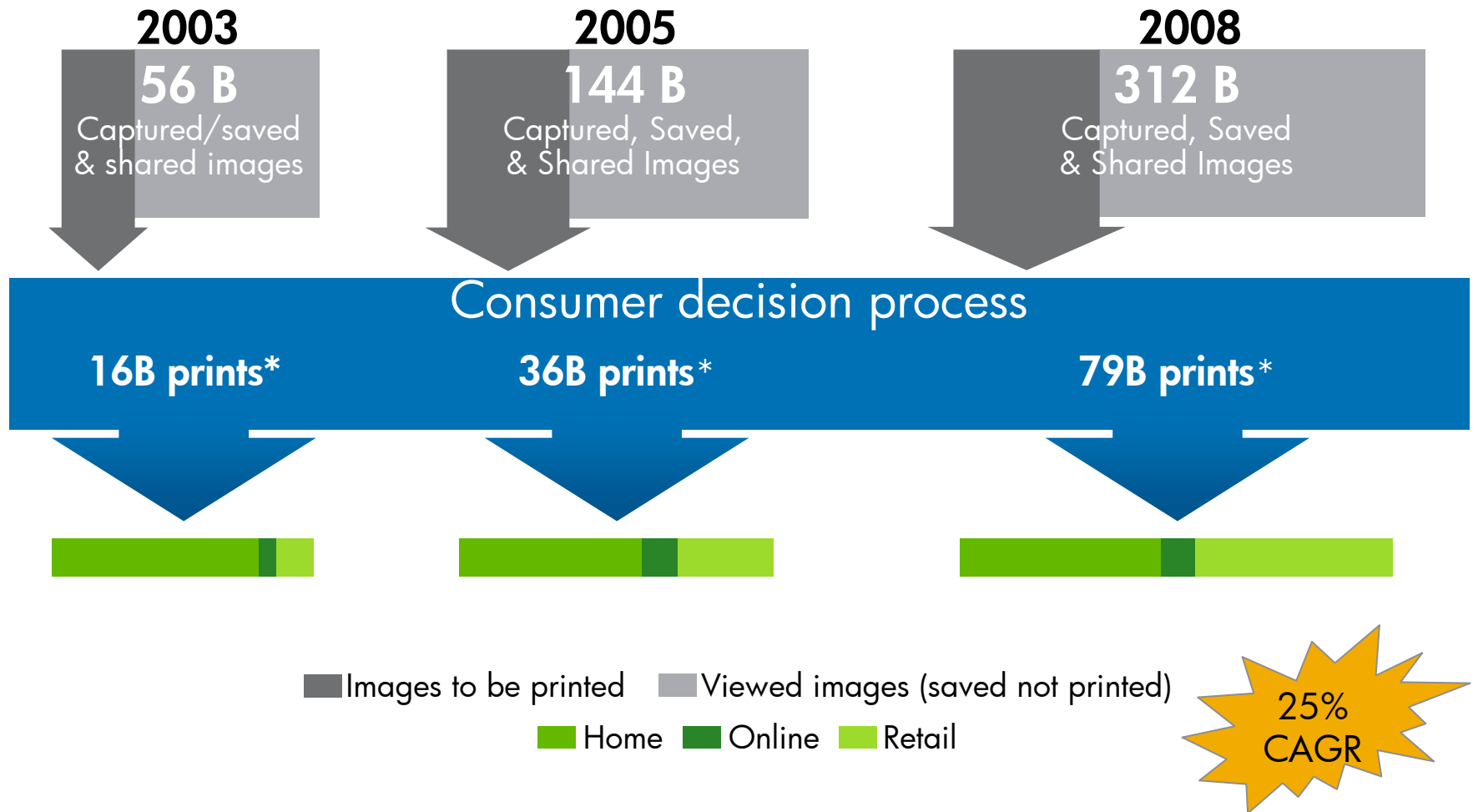

Study conducted in 2004 found that
- HP monochrome toner cartridges and black IJ cartridges are **9x more reliable** than remanufactured alternatives, on average
- Color IJ cartridges are **50x more reliable** than remanufactured alternatives, on average

* CPP = cost-per-page

Digital photography

Worldwide digital prints market forecast

2003
56 B
Captured/saved & shared images

2005
144 B
Captured, Saved, & Shared Images

2008
312 B
Captured, Saved, & Shared Images

Consumer decision process

16B prints*

36B prints*

79B prints*

■ Images to be printed ■ Viewed images (saved not printed)

■ Home ■ Online ■ Retail

25% CAGR

*Note: Photo prints in the home are on photo paper and non-photo paper. *4x6 equivalents
Source: HP digital prints forecast

Snapfish acquisition[1]

- Extension of HP's digital photography strategy
  - Digital photography portfolio that provides the best choice, convenience, control and affordability
  - In the home, through the home, from the home

- Why Snapfish?
  - Leading online service in NA
    - Over 13 million members
    - 500,000+ new members monthly
  - Broadest offering and best customer value
    - 70 unique photo gift products
    - 4 x 6" prints as low as $.015[2]
  - Develop and maintain significant partnerships (ISPs, retailers, and mobile carriers)

- HP & Snapfish synergies
  - Broadest customer choice
  - Snapfish online photo expertise
  - HP worldwide customer reach

1. The acquisition of Snapfish is expected to close in mid-April
2. 4x6" prints at 19c every day and 15c for pre-paid only

"The bigger, the better"
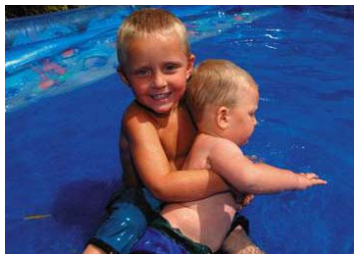
Size	Walmart digital photo prints[1] Price/print	HP home printing Price/print
4x6	$0.19	**$0.24**[2]
5x7	$1.47	**$0.81**[3]
8x10	$2.84	**$1.49**

Figures based on estimated US street prices. Actual cost may vary based on printer used, images printed and other factors

[1] Prices for digital photo development as of 3/17/05 in U.S. Wal-Mart 1-hour in-store pick-up, Ritz.com Internet Xpress Prints, 1-hour in-store pick-up. Shipping charges are additional cost.

[2] HP 95 series photo value pack with 200 premium sheets, 2 customized 95 Series tri-color inkjet print cartridges (HP Vivera Inks), suggested MSRP U.S.

[3] HP 97 twin pack with premium plus sheets, estimated US street price

Home photo quality exceeding retail

- New innovations
  - Home photos that resist fading up to 108 years[1]
  - Professional black-and-white photos that resist fading up to 115 years
  - Increased color palette up to 72 million different color and grayscale combinations
  - Sophisticated ink and toner formulations
  - Broad selection of photo papers

- Consumers want…
  - Best print quality
  - Best performance
  - Best innovation choices

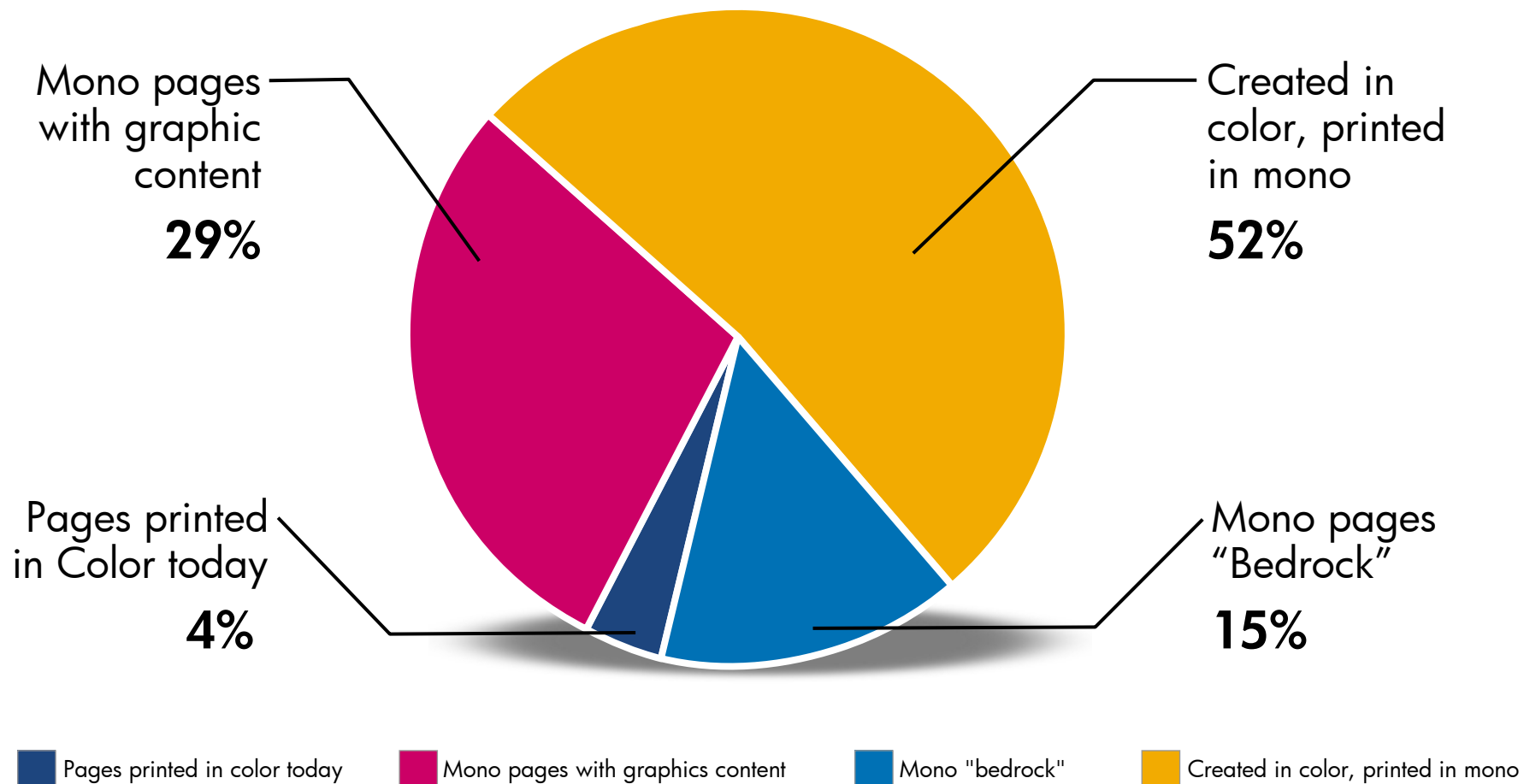[1]**Source:** Wilhelm Imaging Research, Inc. 2002, 2003, 2004

[1]Based on Wilhelm-Research.com light fade testing under glass using the HP 95 or 97 tri-color and HP 99 photo color inkjet print cartridge and HP Premium Plus Photo Papers. For more information, visit http://hp.com/go/premiumplusphoto
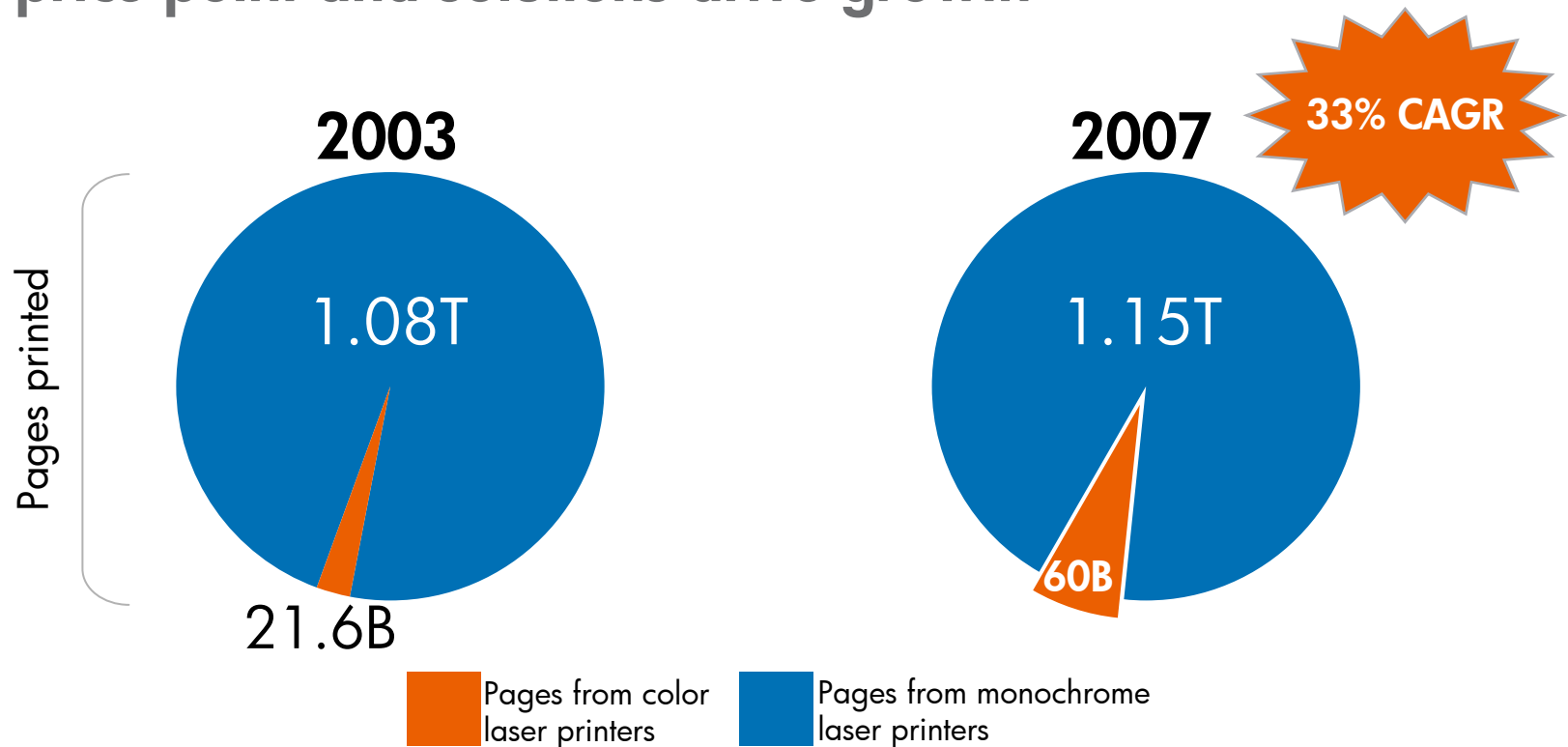
Color in the office

2004 office laser pages market
85% of market now ready for color

Mono pages with graphic content
29%

Created in color, printed in mono
52%

Pages printed in Color today
4%

Mono pages "Bedrock"
15%

Pages printed in color today | Mono pages with graphics content | Mono "bedrock" | Created in color, printed in mono

Make color mainstream in the office

New price point and solutions drive growth

2003

2007

33% CAGR

Pages printed

1.08T

21.6B

1.15T

60B

■ Pages from color laser printers   ■ Pages from monochrome laser printers

- Color LaserJet unit shipments were up 68% in 1Q05

Color laser unit growth projections

CAGR '04–'07

WW color laser unit growth by segment

Legend: Unit growth

Categories: AiO, Low end, MF WKGP
Y-axis: 0% to 250%
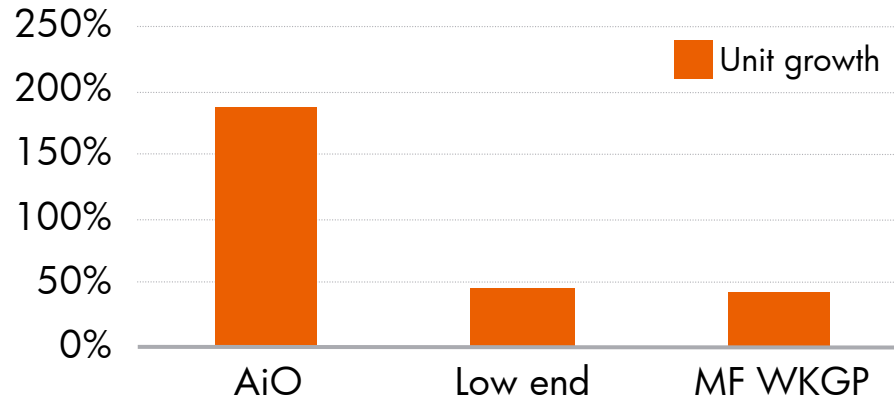
WW color laser page and revenue growth

Legend: Growth in pages, Revenue growth

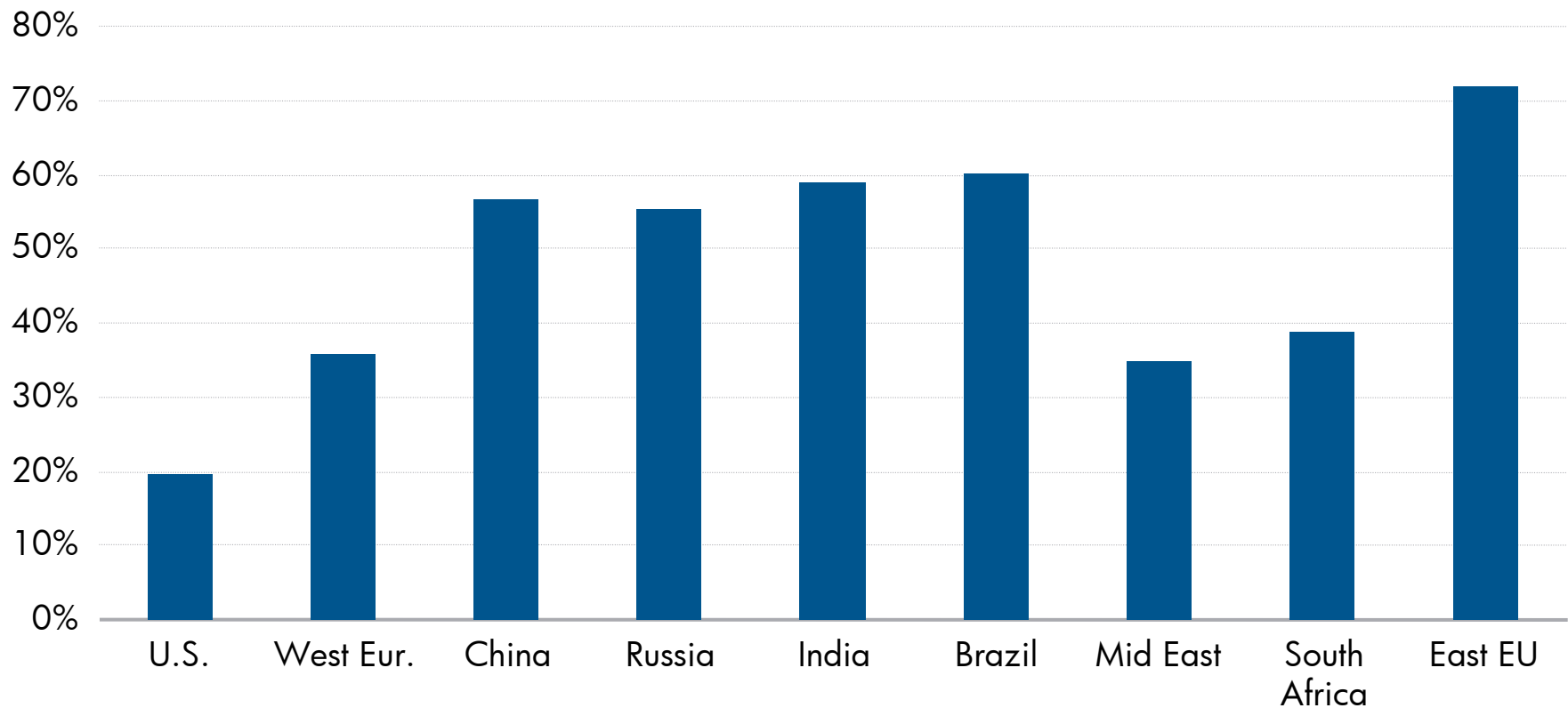Categories: AiO, Low end, MF WKGP
Y-axis: 0% to 250%
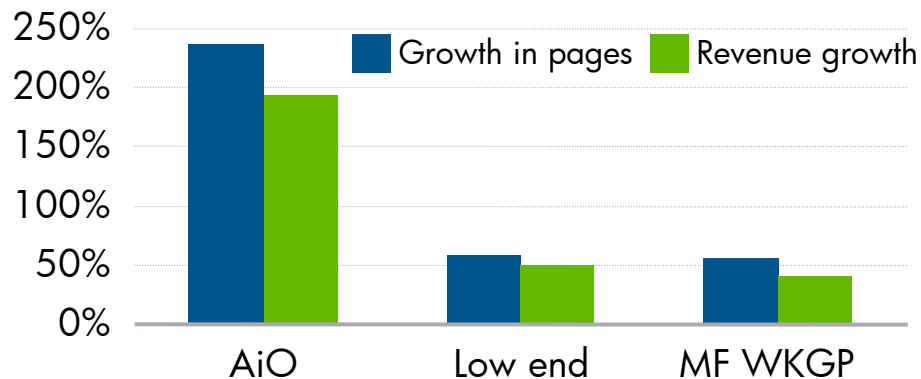
Source: HP Internal

SF color laser unit growth projections

Emerging geographies (IDC data CAGR '03 – '07)

Laser and ink shipments are increasing in emerging geographies

Source: IDC March 8, 2005

Reduce maintenance with HP

- Fewer replaceable parts cuts costs
  - The Dell 5100cn requires 23 parts beyond toner vs. only 5 for the HP Color LaserJet 4650 in the first
    3 years when printing 10,000 pages per month

- Intelligent design ensures minimal maintenance
  - Be sure to consider the ease with which you can replace fusers and add memory. With HP, it's simple. With Dell, it may not be.

- Enough memory
  - Dell's 3000cn, 3100cn, and 5100cn can experience memory errors in best-PQ mode, which may force users to add memory to print reliably in best PQ-mode.

- 20 years of legendary reliability

**Replacement parts beyond toner**

at 10,000 pages/month for 3 years

HP Color LaserJet 4650	5
Dell 5100cn	23
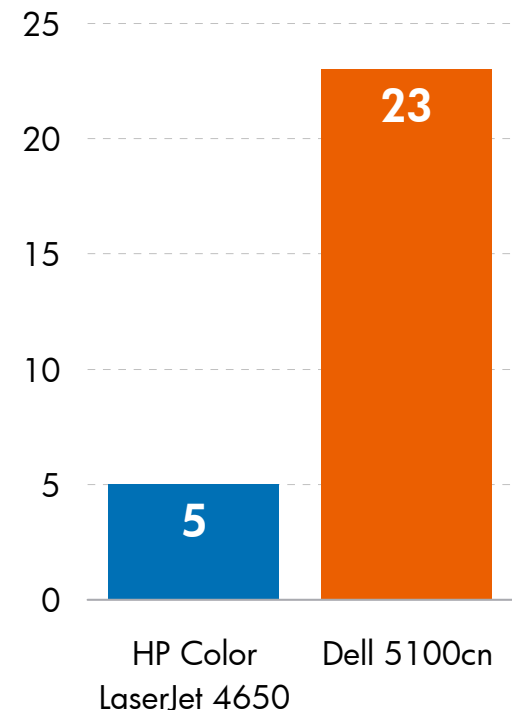
PC Magazine service & reliability survey

VENDOR	2003	2002	2001	2000	1999	1998	1997	1996	1995
Brother	B	B	C	C	D	C	D	D	C
Canon	B–	D–	C	D	D	B	B	B	A
Dell	**C**	—	—	—	—	—	—	—	—
Epson	B	A	A	B	A	A	A	A	A
HP	**A+**	**A+**	**A**	**A**	**A**	**A**	**A**	**A**	**A**
Kyocera-Mita	—	—	—	—	—	—	—	—	—
Lexmark	D	D+	B	C	B	B	B	B	B
Minolta-QMS	C	—	—	—	D	D	D	D	C
Okidata	D	D	C	C	C	C	C	D	B
Panasonic	B	B	C	A	B	B	B	B	B
Ricoh	—	—	—	—	—	—	—	—	—
Samsung	A	—	—	—	—	—	—	—	—
Xerox/Tek	E	E	C/D	C/D	B/D	D	C	C/D	—/D

Solid-ink devices have tradeoffs
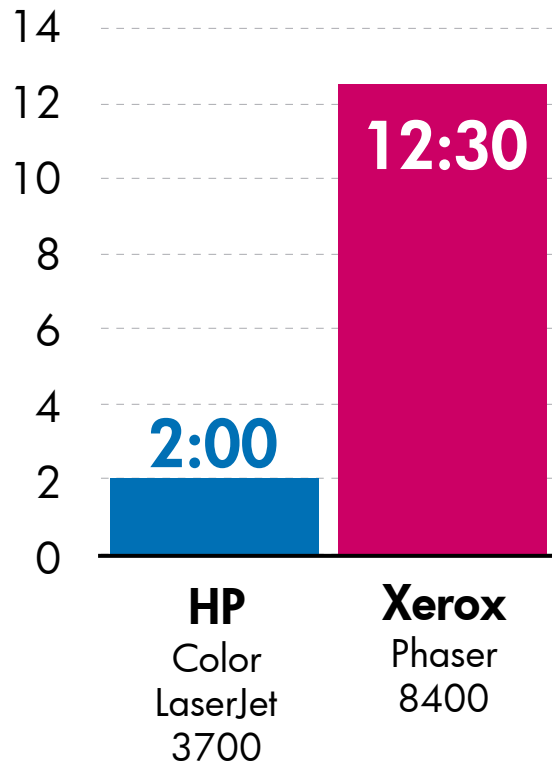
First-page-out time (in minutes) from power off

Energy usage	HP Color LaserJet 3700	Xerox Phaser 8400
Printing	400 watts	400 watts
Standby	25 watts	100 watts
Powersave	14.5 watts	N/A

The Xerox Phaser 8400 takes substantially more time to warm up and print one page from power off. Plus it consumes more power because a true ENERGY-STAR-compliant powersave mode is only available on special "S" bundles. And whenever you turn the power off and restart — or whenever it enters powersave — it purges about $10 worth of ink through the print nozzles.

Enterprise imaging and printing
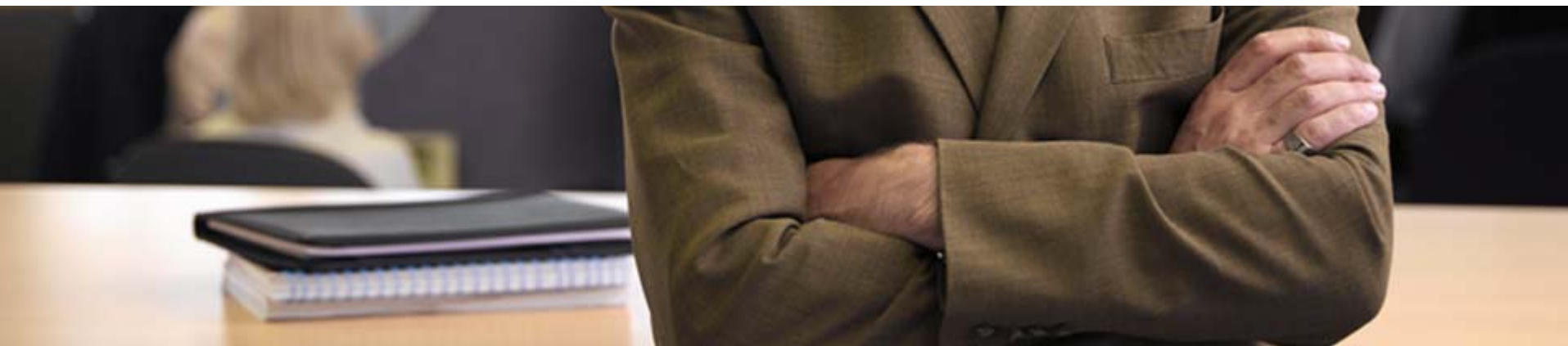
Maximizing the market opportunity

Digital printing (5%)

Imaging   **Convergence**

Images   Copies

Packaging   Fax

Books   Forms

Magazines   Catalogs

Newspapers   Brochures

Publishing
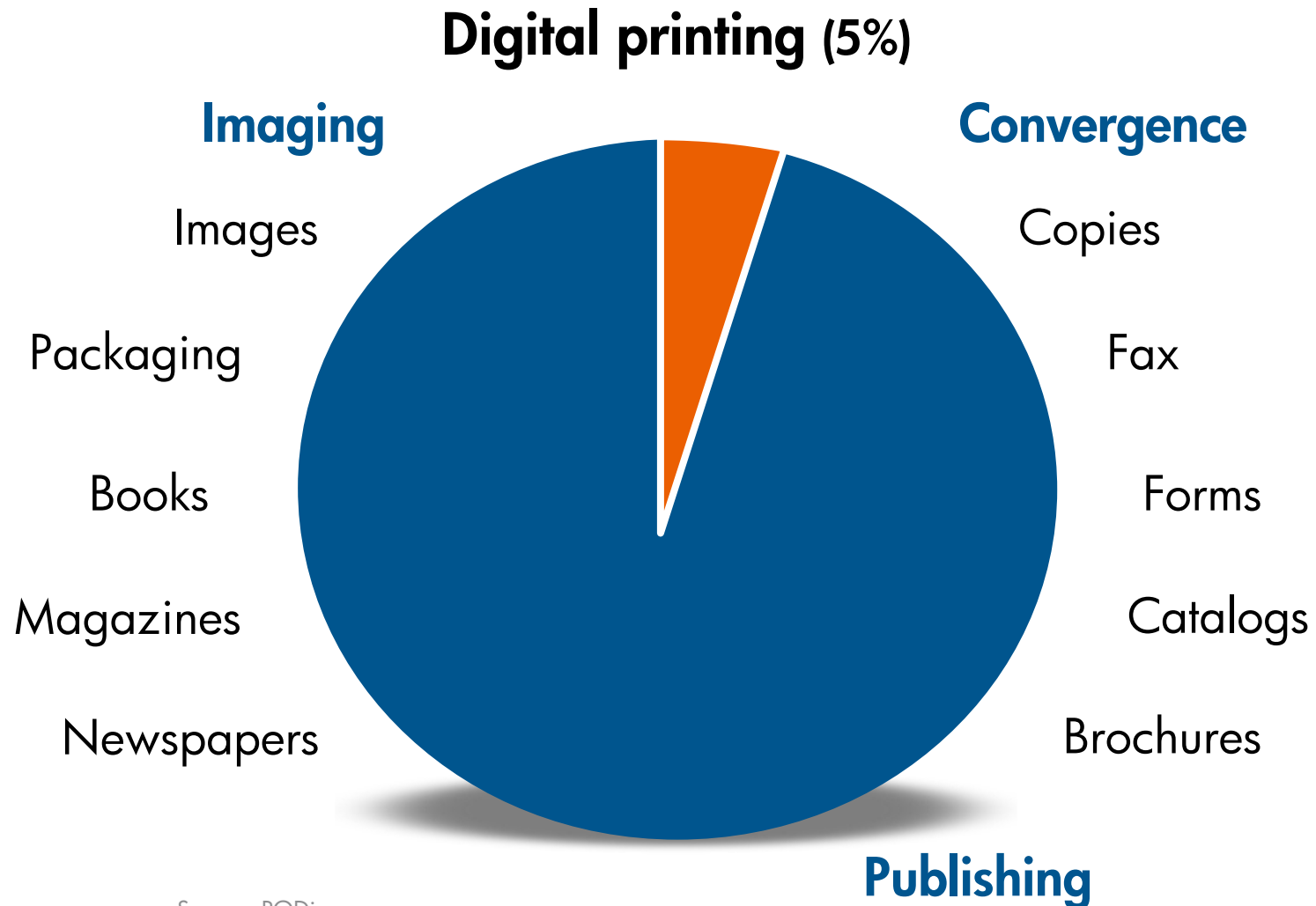
Source: PODi

Multi-function printers (MFPs)

- 2005 addressable market, including hardware and supplies of $40B

- Slow declining CAGR of (2%) through 2008

- Estimated 30% increase in printed pages over SF devices

- Market trends include

  - I&P Optimization in the office. TCO reduction of roughly 30%

  - Adoption of distributed MFPs

  - Mono to color transition

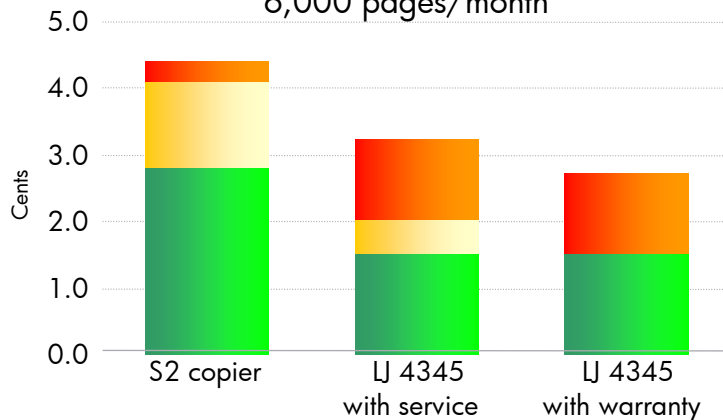- HP expected market share of 10% by exit 2006

4Q04 market share

Canon 22%

Brother 11%

Xerox 15%

Ricoh 16%

HP 3%

Konica Minolta 9%

Other 24%
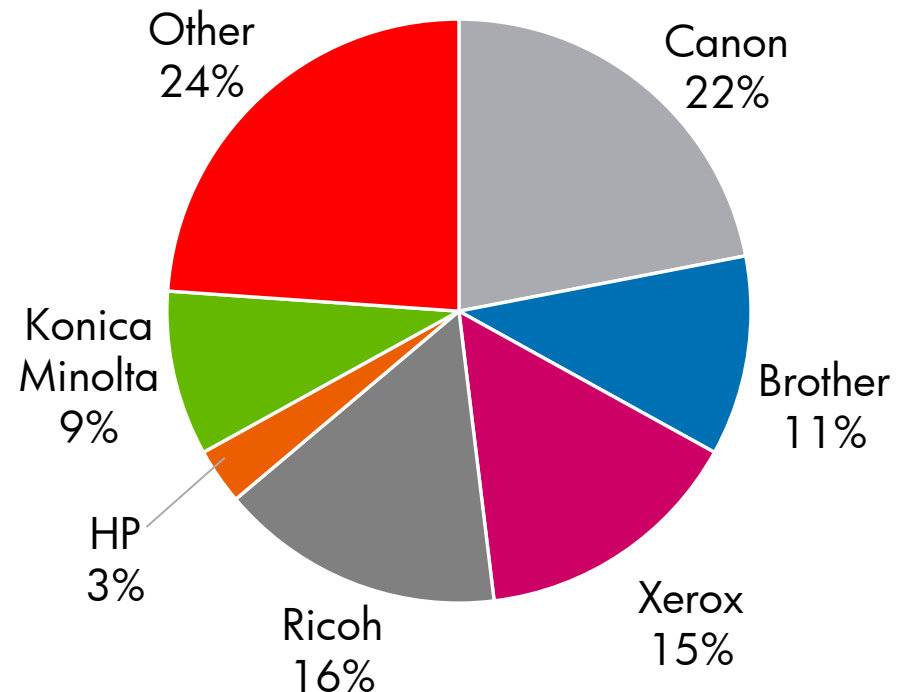
Source IDC 4Q, 2004

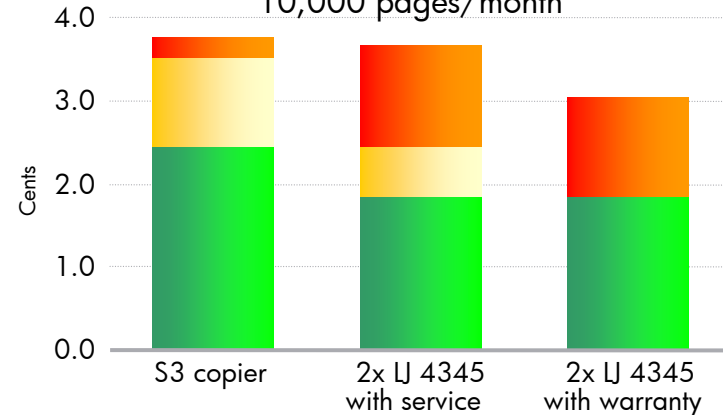# The distributed printer-based MFP advantage

Total cost-per-page over three years

S2: 1x HP LaserJet 4345mfp
6,000 pages/month

S3: 2x HP LaserJet 4345mfp
10,000 pages/month

S4: 3x HP LaserJet 4345mfp
22,000 pages/month

Legend: Toner (orange) · Service (yellow) · Hardware (green)
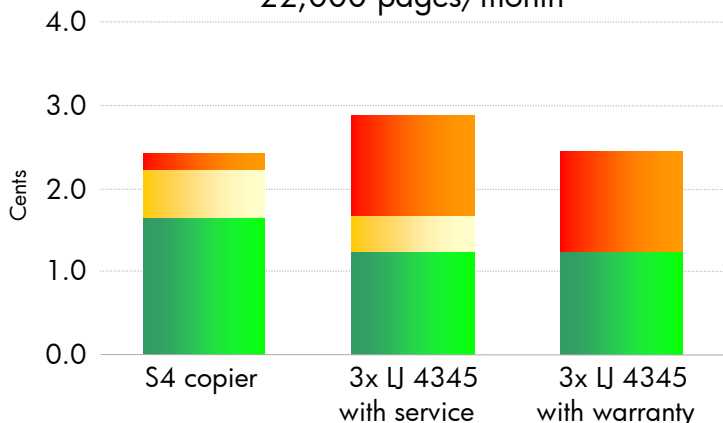
Segment 2
- 1-to-1 deployment
- Higher performance (45ppm)
- Significantly lower total cost

Segments 3 & 4
- 2-to-1 and 3-to-1 deployment
- Higher productivity (closer to the user, less contention)
- Comparable total cost
- Redundancy

Indigo Digital Press

- $950M addressable market in 2005*

- CAGR of 33% through 2008

- Trends
  - Analog to digital transformation
    - TCO reduction
    - Jobs are getting shorter
    - TAT is getting faster
    - More personalization & variable data print jobs
    - Automated workflows

2004 market share

Versamark 3%

Xeikon 10%

Xerox 33%

HP 37%

Kodak 17%
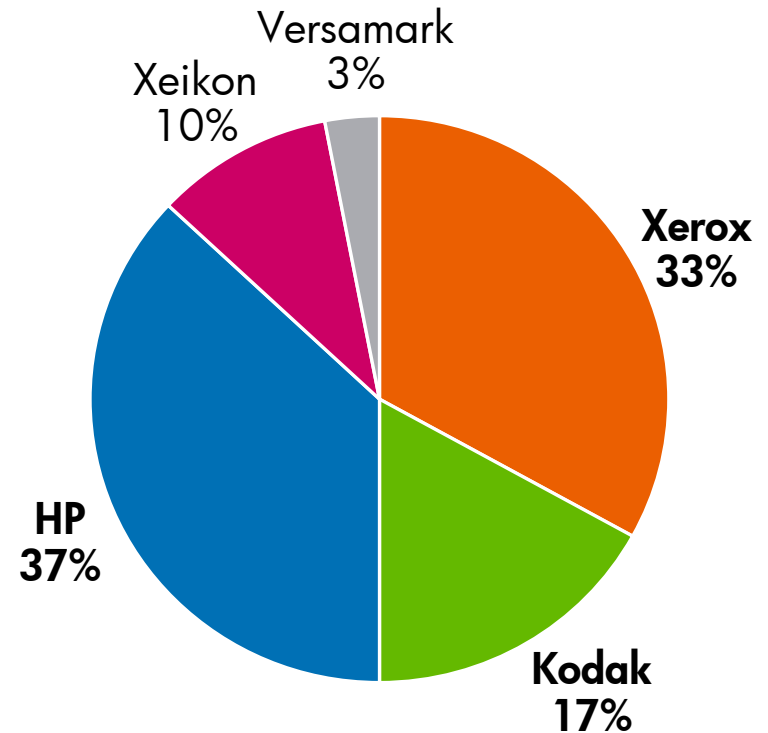
*Includes devices, supplies, services

Source: Infotrends/CAPV

Large format presses

- Market share includes 80% market share in technical devices and 33% in creative devices

- Total 2005 addressable market of $7.5B*

- CAGR of 7% through 2008

- Trends
  - Technical/CAD: Significant growth of color printing
  - Creatives/photography: Digital adoption and in-house printing
  - PSP: High growth of outdoor applications and shift of prints from analog to digital

Market share

- Other 6%
- Outdoor 11%
- Canon 3%
- OCE 4%
- Epson 13%
- HP 63%
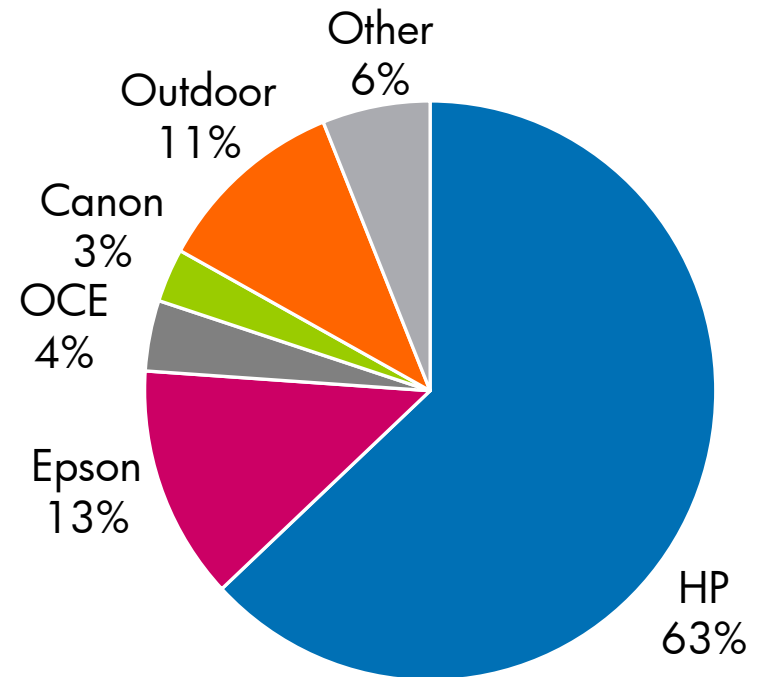
* Includes devices, supplies, and services

Source: ???

Personal Systems Group
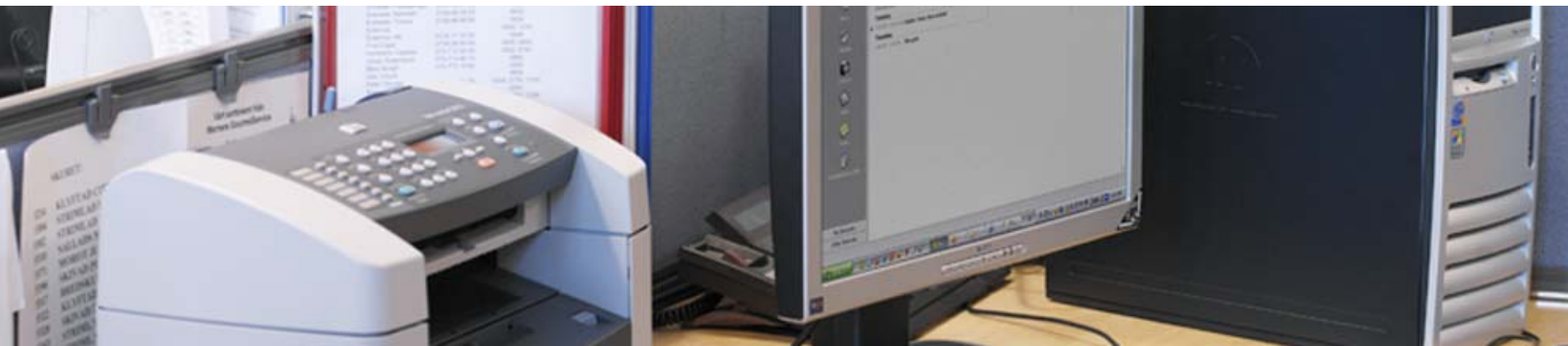
PSG – profit vs. share

WW total PC market share[1]

	1Q03	2Q03	3Q03	4Q03	1Q04	2Q04	3Q04	4Q04
HP NB	16.0%	17.4%	17.0%	16.7%	15.3%	14.8%	14.9%	15.6%
HP DT	14.8%	14.3%	15.8%	15.9%	14.8%	15.2%	15.8%	15.3%
Dell	16.7%	17.0%	16.7%	15.8%	18.2%	18.0%	17.8%	16.7%
HP	15.1%	15.1%	16.1%	16.1%	14.9%	15.1%	15.5%	15.4%
IBM	5.1%	6.0%	5.4%	5.6%	5.2%	6.2%	5.7%	5.3%
Acer	2.9%	2.9%	3.0%	3.8%	3.4%	3.2%	3.7%	4.4%
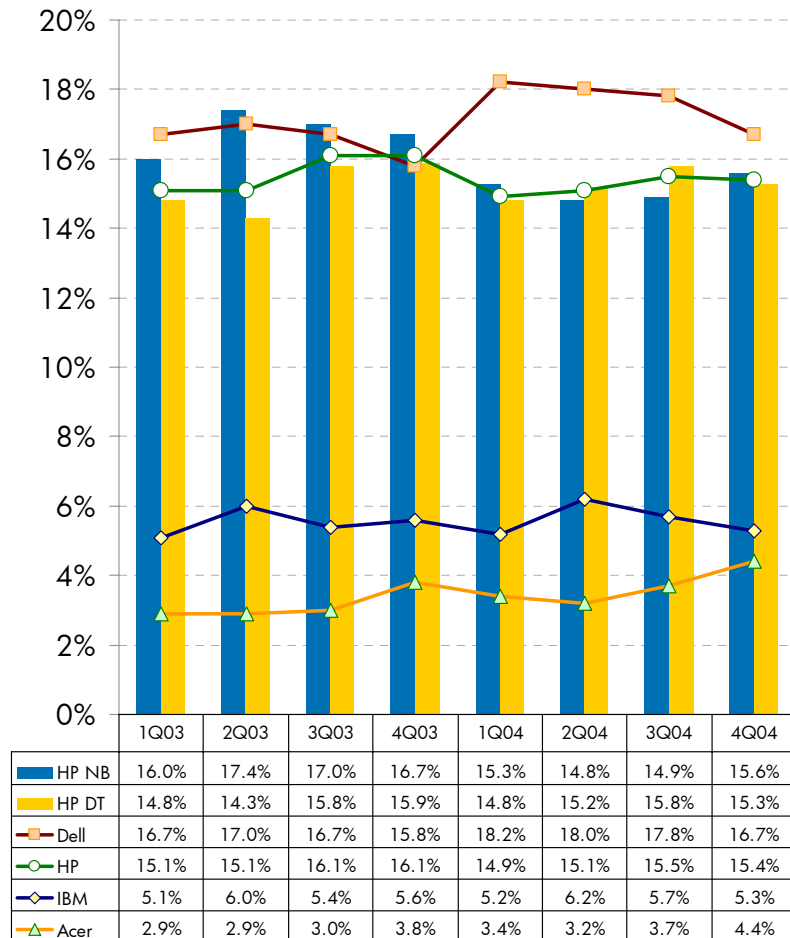
Operating profit[2]
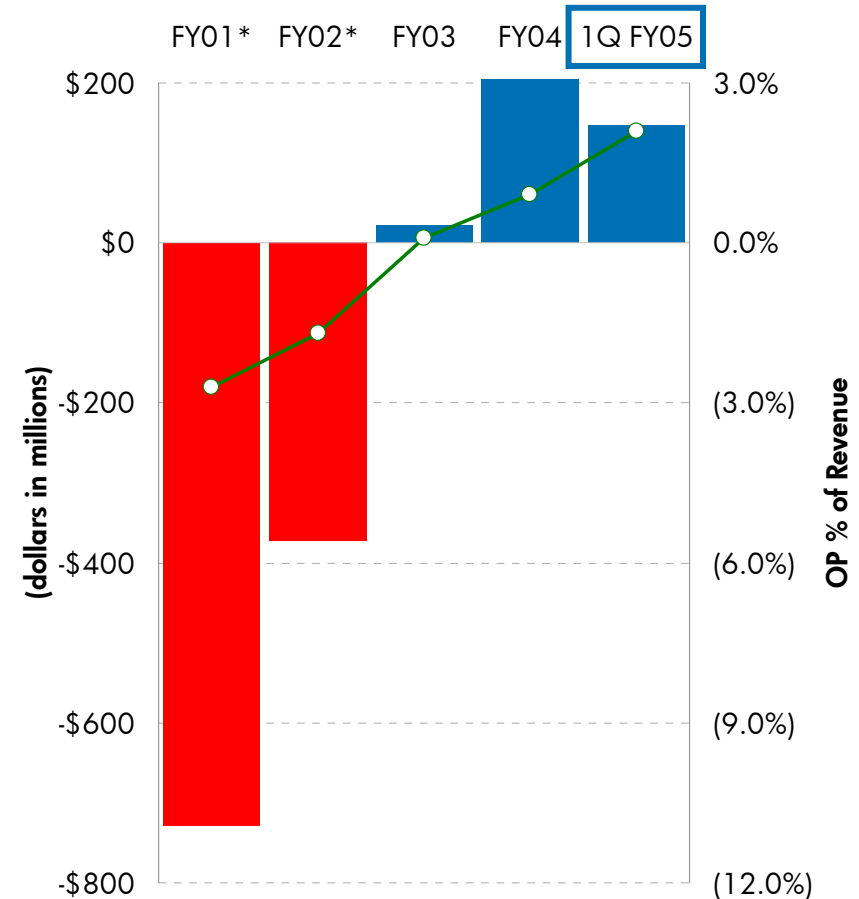
1. IDC Q4 2004 PC Market Share
2. Stated on a combined company basis, please refer to supplementary slides for additional information

PSG – notebook & desktop share

WW notebook market share[1]

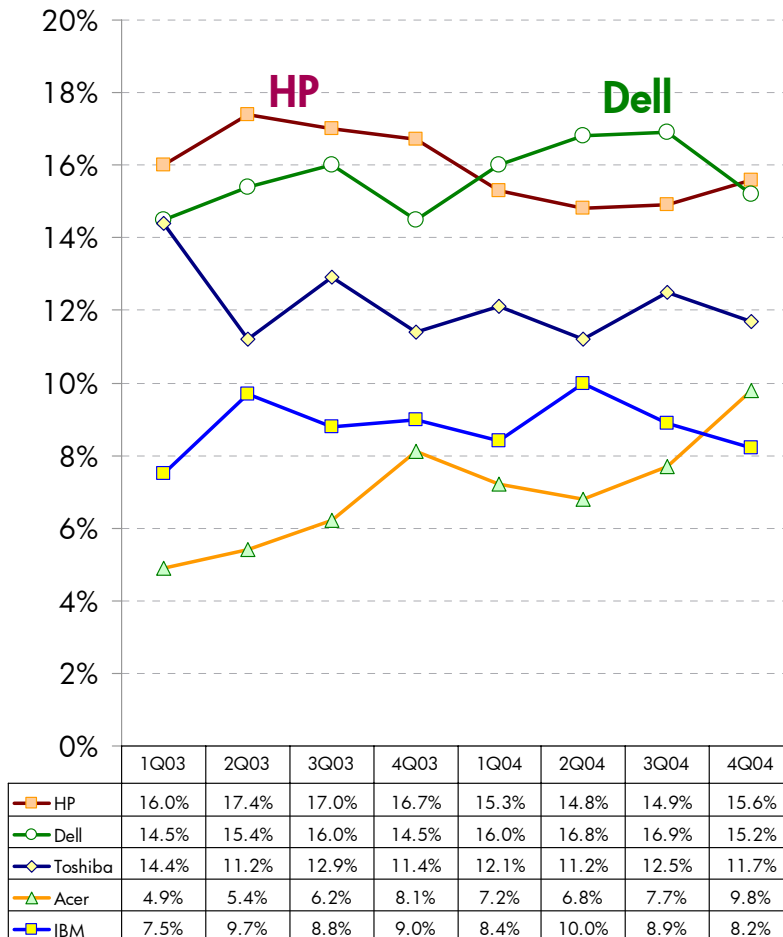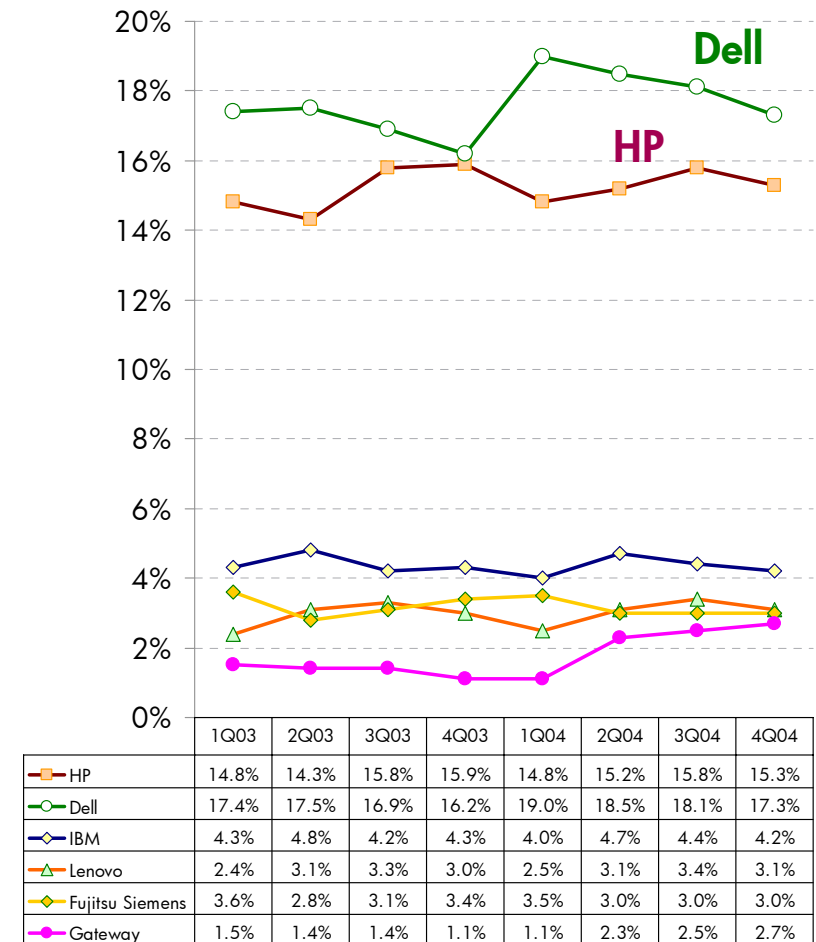|	1Q03	2Q03	3Q03	4Q03	1Q04	2Q04	3Q04	4Q04
HP	16.0%	17.4%	17.0%	16.7%	15.3%	14.8%	14.9%	15.6%
Dell	14.5%	15.4%	16.0%	14.5%	16.0%	16.8%	16.9%	15.2%
Toshiba	14.4%	11.2%	12.9%	11.4%	12.1%	11.2%	12.5%	11.7%
Acer	4.9%	5.4%	6.2%	8.1%	7.2%	6.8%	7.7%	9.8%
IBM	7.5%	9.7%	8.8%	9.0%	8.4%	10.0%	8.9%	8.2%

WW desktop market share[1]

	1Q03	2Q03	3Q03	4Q03	1Q04	2Q04	3Q04	4Q04
HP	14.8%	14.3%	15.8%	15.9%	14.8%	15.2%	15.8%	15.3%
Dell	17.4%	17.5%	16.9%	16.2%	19.0%	18.5%	18.1%	17.3%
IBM	4.3%	4.8%	4.2%	4.3%	4.0%	4.7%	4.4%	4.2%
Lenovo	2.4%	3.1%	3.3%	3.0%	2.5%	3.1%	3.4%	3.1%
Fujitsu Siemens	3.6%	2.8%	3.1%	3.4%	3.5%	3.0%	3.0%	3.0%
Gateway	1.5%	1.4%	1.4%	1.1%	1.1%	2.3%	2.5%	2.7%

1. IDC Q4 2004 PC Market Share

PSG – 2005 portfolio

Commercial notebooks, February 2005

- Innovation provides improved security, ease of use, reliability and battery life
- HP Mobile Data Protection System reduces data corruption risk by up to 50 percent by protecting the hard drive from the shock and vibration
- Advanced security features
  - Credential Manager provides users single sign-on capability
  - Smart Card pre-boot authentication
  - DriveLock hard drive protection
  - HP ProtectTools embedded security chip
- HP Fast Charge Technology allows quick recharge
- Intel's Centrino Mobile Technology provides wireless connectivity and improves battery life up to 5 hours

- Full function tablet PC delivering performance and compatibility in an innovative convertible style

Consumer PCs, March 2005

- Innovation through multimedia integration
- Designed to be the digital hub, easily integrating with printers, scanners, digital cameras, televisions, iPod, etc
- New models include:
  - HP Pavilion ze2000 Notebook PC ($699+)
  - HP Pavilion d4000 Series Desktop PC
  - HP Pavilion a1000 Series Desktop PC
  - HP Media Center m7000 Series Photosmart PC
- Strong media management functionality
  - memory card slots & 1394 support
  - enhanced software
  - no boot DVD play
  - removable hard-drives
  - high speed video
- Integrated Apple iPod from HP dock
- Bundled with multimedia HP Wireless Keyboard
- Pre-installed Norton Internet Security 2005 and Intermute's SpySubtract Pro to safeguard from Spyware and viruses
- Optional HP Personal Media Drive available with up to 400GB of capacity, providing a fast and easy way to store, share and manage videos, photos, and music
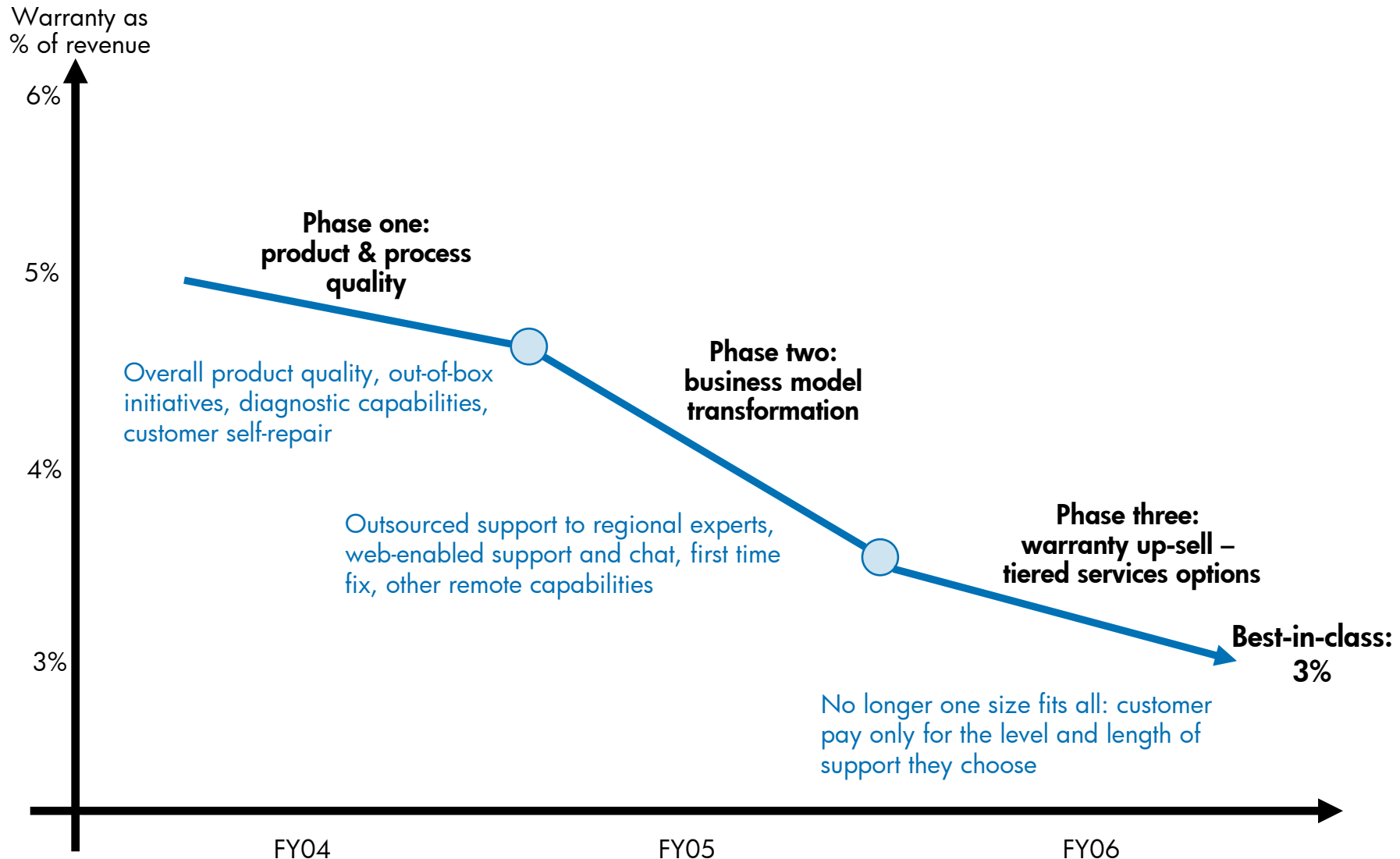
PSG P&L opportunity vs. best-in-class[1]

Gross margin %	~ 300 pts.	• Direct sales • Up-sell/attach rates • Product mix • Supply chain/warranty
OPEX %	~ 100 pts.	• Field selling costs/hunter-farmer • Disciplined R&D
Op. margin %	~ 400 pts.	

[1] Based on internal estimates
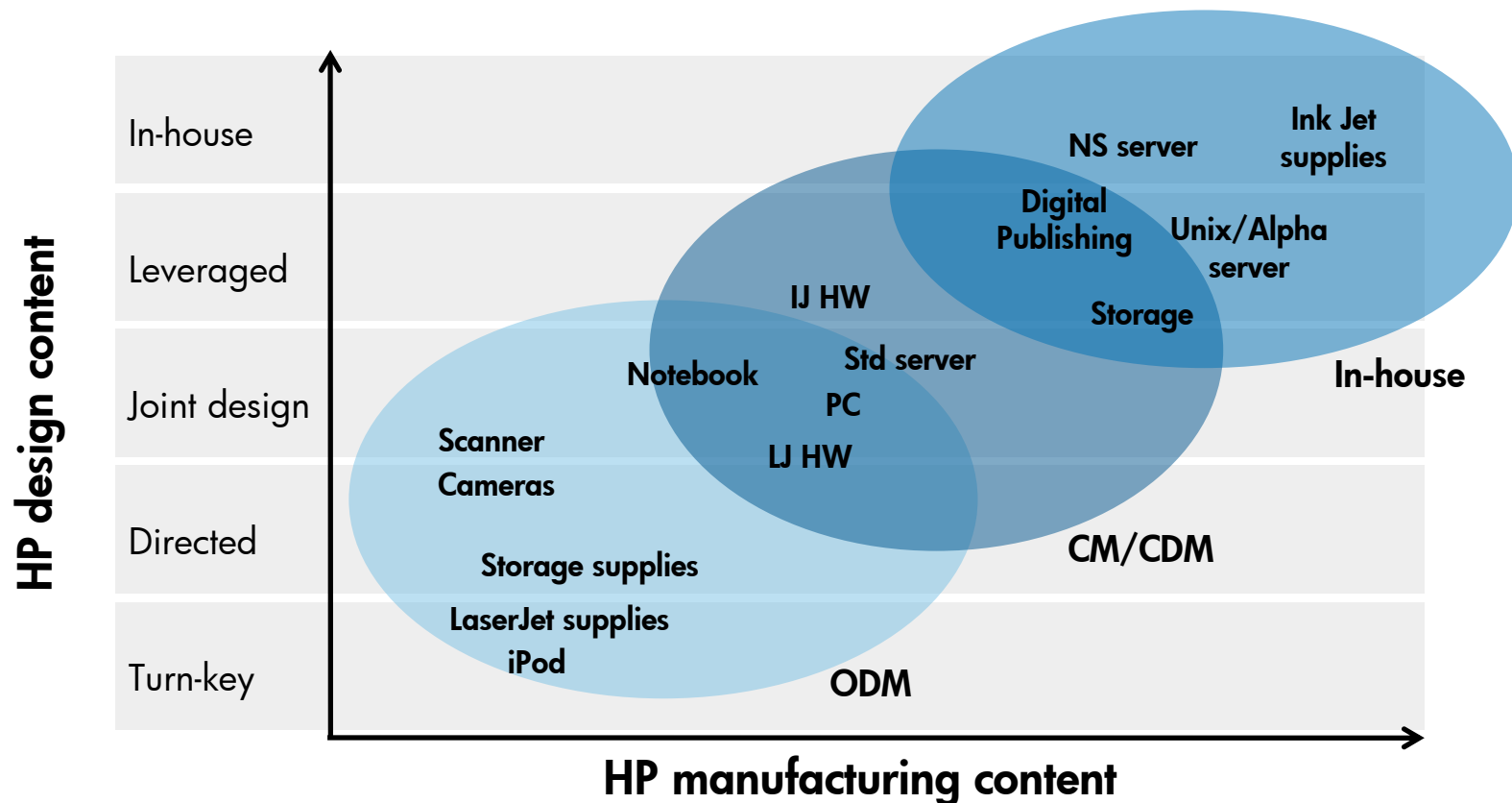
PSG warranty improvement

Warranty as % of revenue

Phase one: product & process quality

Overall product quality, out-of-box initiatives, diagnostic capabilities, customer self-repair

Phase two: business model transformation

Outsourced support to regional experts, web-enabled support and chat, first time fix, other remote capabilities

Phase three: warranty up-sell – tiered services options

Best-in-class: 3%

No longer one size fits all: customer pay only for the level and length of support they choose

6%

5%

4%

3%

FY04

FY05

FY06

PSG upsell portfolio

Category	Examples	Direct	Indirect
Displays	Branded displays	✓	✓
HP accessories	Docking stations, batteries	✓	✓
3rd party options	Mice, keyboards, carrying cases, cables	✓	
Warranty extensions	Extensions beyond standard warranty	✓	✓
Freight & logistics	Freight expedites, coordinated or special logistic services	✓	
Customization services	Image loading, asset tagging	✓	
ISPs/portals	ISP bounties, portal partnerships	✓	✓
Software/services	Office apps, security software	✓	
Lifecycle services	PC recycling, Installation, data transfer	✓	

Manufacturing models

1. Using a range of design models from OEM to internal
2. Matching the strategic intent of a particular product at a particular time
3. Focusing internal innovation where it matters most to our customers
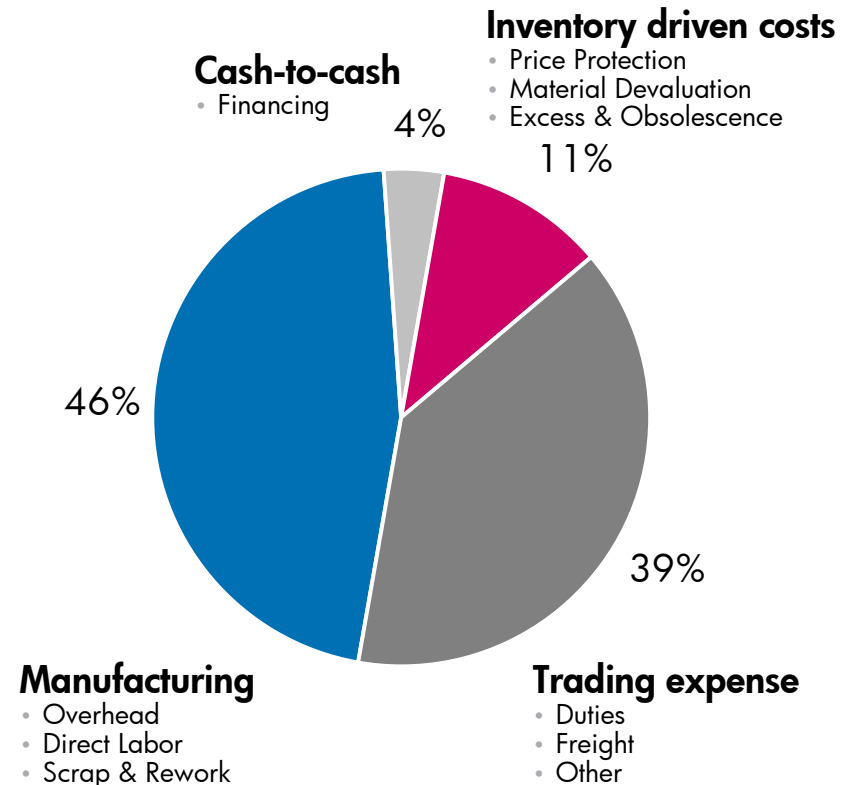
Product and part simplification

SKU rationalization	Business PC	48% reduction in base units and HP branded options **10-40% improvement in category service level 2 day OCT reduction**
	Enterprise systems	19% SKU reduction **34% increase in SKU productivity (revenue per SKU)**
Parts & options simplification	Inkjet personal printers	7 control panels → 3 control panels 5 power supplies → 2 power supplies 24 trays → 12 trays 12 clean out → 1 clean out **$130M saving opportunity**

45 projects in the area of design for Supply Chain
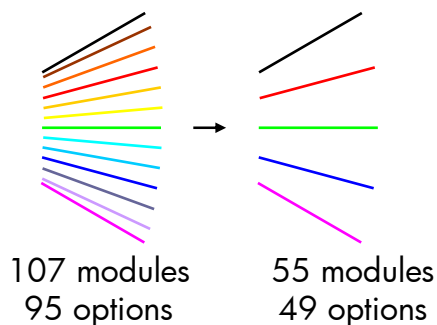
PSG supply chain

- Halved final assembly manufacturing sites since 2000
- 14% reduction in commercial Supply Chain cost/box
- Moved volume to lower cost locations
  - Notebooks from Taiwan to China
  - Europe volume from Scotland/France to Czech and Hungary
  - More Americas volume to Mexico (closed Swedesboro,NJ and Omaha factories)
  - Sold certain HP owned LA and European facilities
- Achieved variable cost production model with over 80% outsourced final assembly (up from 50% in 2000)
- Reduced the number of suppliers to consolidate spend
- Spend over $1B per annum with several suppliers

Supply Chain cost categories

**Cash-to-cash**
• Financing
4%

Inventory driven costs
• Price Protection
• Material Devaluation
• Excess & Obsolescence
11%

46%

39%

Manufacturing
• Overhead
• Direct Labor
• Scrap & Rework

Trading expense
• Duties
• Freight
• Other

SC optimization examples

Variety control

107 modules
95 options → 55 modules
49 options

42% less inventory <u>and</u> better availability for **bPC**; $25M

Logistics enhancement

2.0

45% reduction

1.1

2002 → 2003
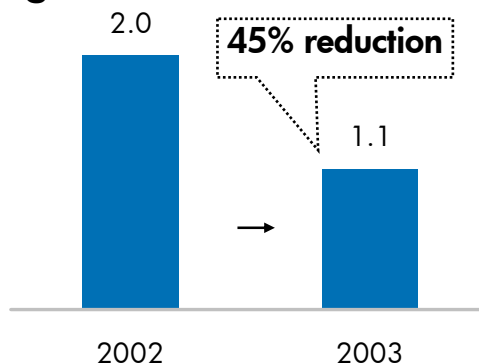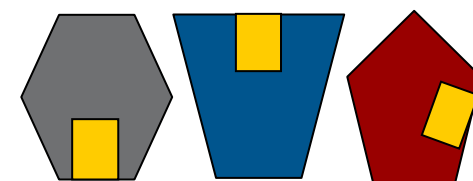
Reducing physical size saves >$1/unit in **IPG** PCC costs

Commonality

Move from ~12 rail kits to 5 at **ESS**

$32M annual material cost reduction

Part and platform re-use

Carrier
Troja
Taj Mahal
Cousteau
Cousteau
Kong
Troja

PXL - A   PXL - B   PXL - LF

Platform commonality
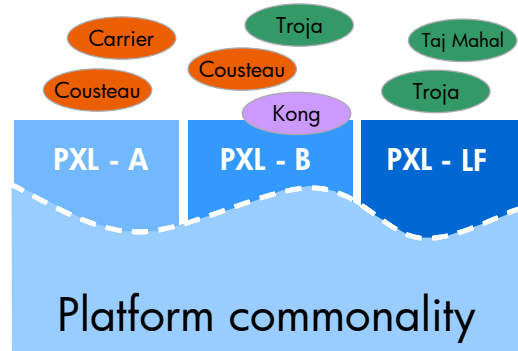
PX Lite saves 38% of development costs; $35M

Postponement
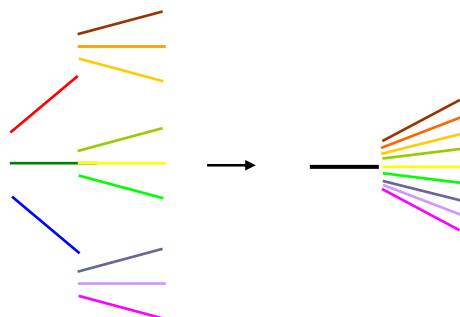
> 98% fill rate with ~2 WOS FGI at **EMEA LaserJet**

Environment & take-back

InkJet supplies recycling increased 25%

HP digital entertainment story

Create

Distribute

Enjoy

Workstations

Utility services

Storage

Publishing

TV and Radio Broadcasting

Film Studios

Music

Individuals

Wireless

Internet

Telcos

Satellite

Cable

General retailers

Media retailers

HP digital media platform

HP digital entertainment hub

Home

Mobile

Cinema

Hotspots

DEVICES

- cameras
- iPAQs
- iPods
- mobile phones
- PCs
- photo printers
- TVs

Media and
entertainment industry

Communications
and retail industries

Consumer
experience

HP services, solutions and devices

Media Hub &
Entertainment Ctr

PCs &
MCE PCs

Notebooks

TV/Projectors

iPod

Mobiles

Printers