

# Flexing zSeries for the Web

Jeff Cattle  
June 2008



**JD Williams Group**

# Company Background



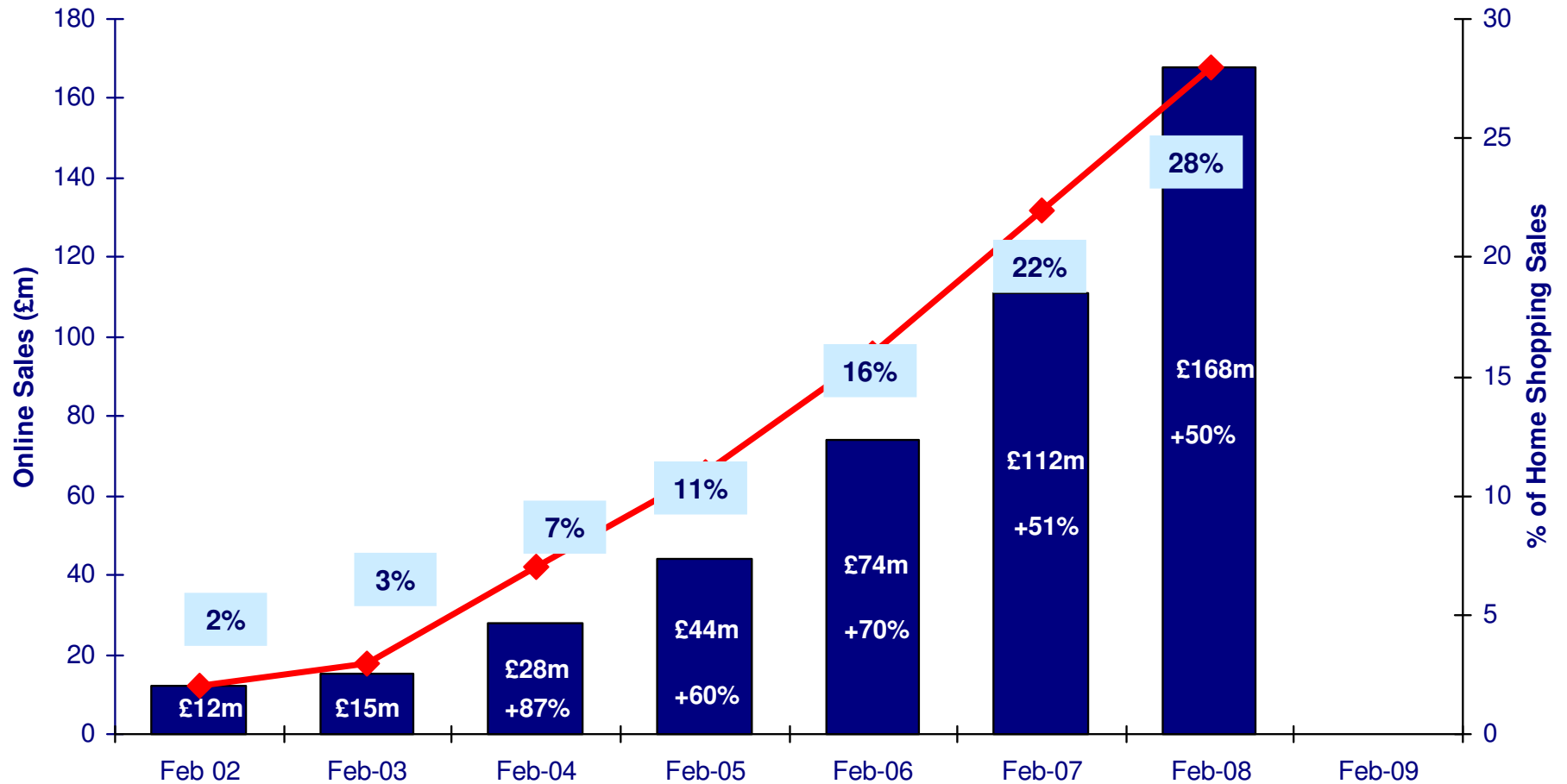
N Brown  
Group plc

- N Brown is the quoted name of JD Williams
- Market capitalisation £660m
- Founded in 1859 – the first mail order company
- J D Williams is the largest direct home shopping group
- Comprising 30+ catalogues and 50+ web sites
- Main sales areas: ladies fashion, footwear, corsetry
- Ordering channels FY 2007
  - Phone 54%, Post 18%, Web 28%



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# Web Growth



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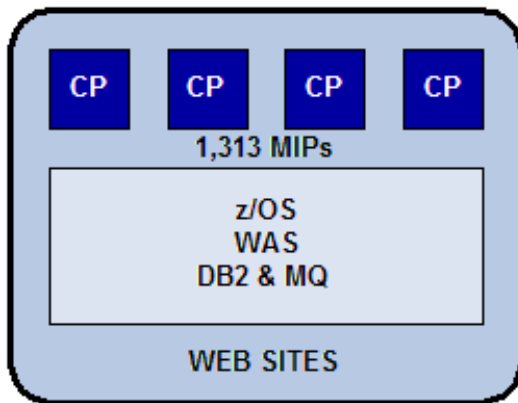
# Challenges

- Sustain business growth
  - 2006: +£38m +51%
  - 2007: +£56m +50%
- Sustain business culture shift
  - More and bigger images
- Stability through rapid change
- Provide cost effective infrastructure
- Leverage / flex zSeries strengths
- Staff utilisation - keep team small



# March 2008

z890-470



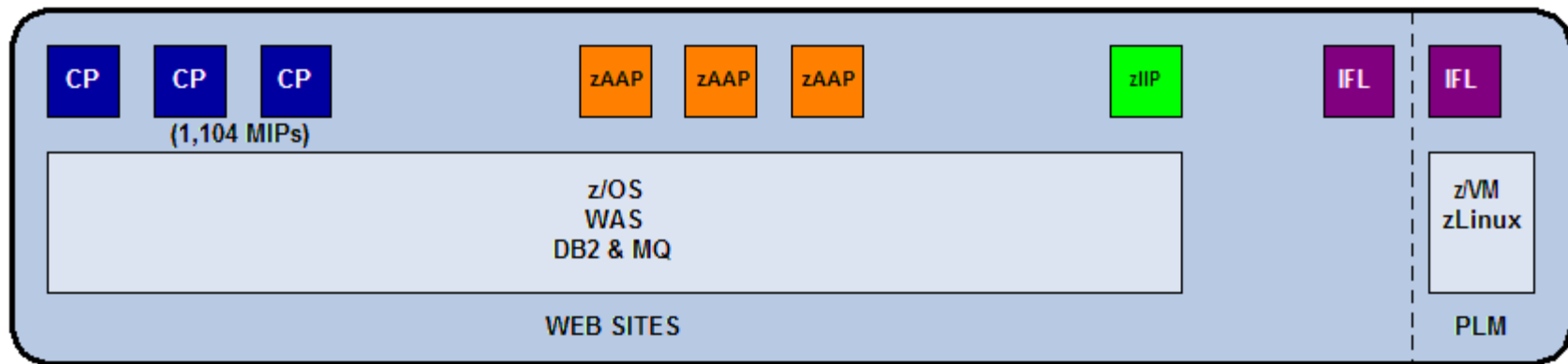
- CPU constrained – high risk
- Memory constrained – medium risk
- Projected business volumes exceeding capacity
- WebSphere 5.0.3 to 6.1 – leading edge
- Upgrade essential



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# April 2008

z9 EC-503



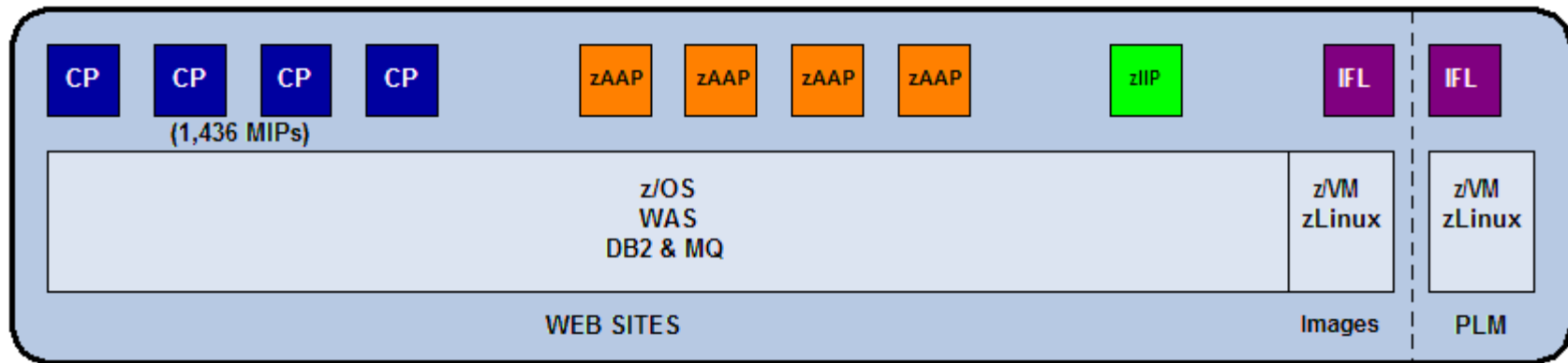
- Upgrade to z9 EC-503
- Reduced core CP MIPs
- Added 3 x zAAPs and 1 x zIIP
- More LPAR memory made available
  - 22GB from 12GB



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# October 2008

z9 EC-504



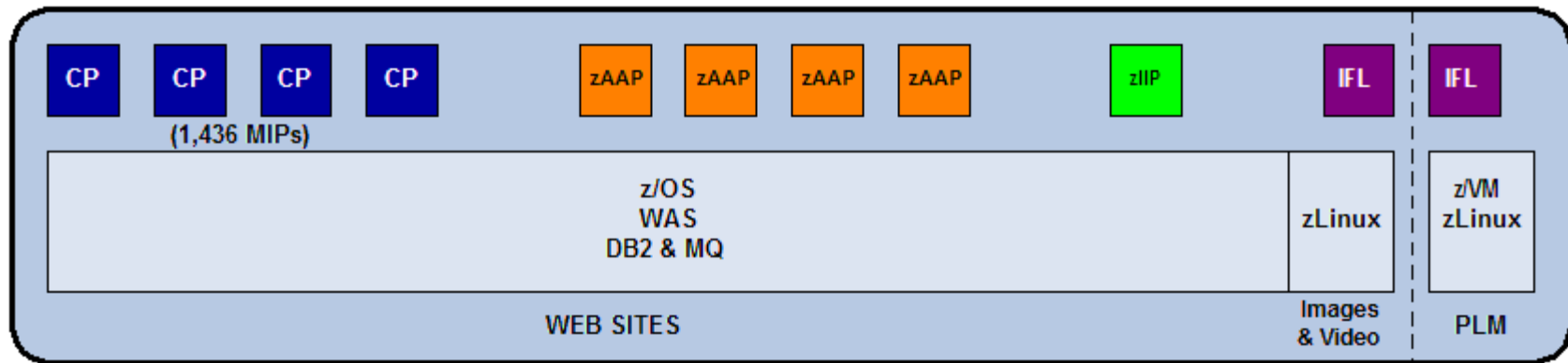
- Upgrade to z9 EC-504
- Additional zAAP plus using IFL
- Caching & configuration work
- zLinux workload for image serving



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# June 2009

z9 EC-504



- More image serving from zLinux
  - Including video and flash images
- Compression (15 Mb bandwidth versus 50 MIPs)
- Native implementation
  - Saves memory
  - Share file systems



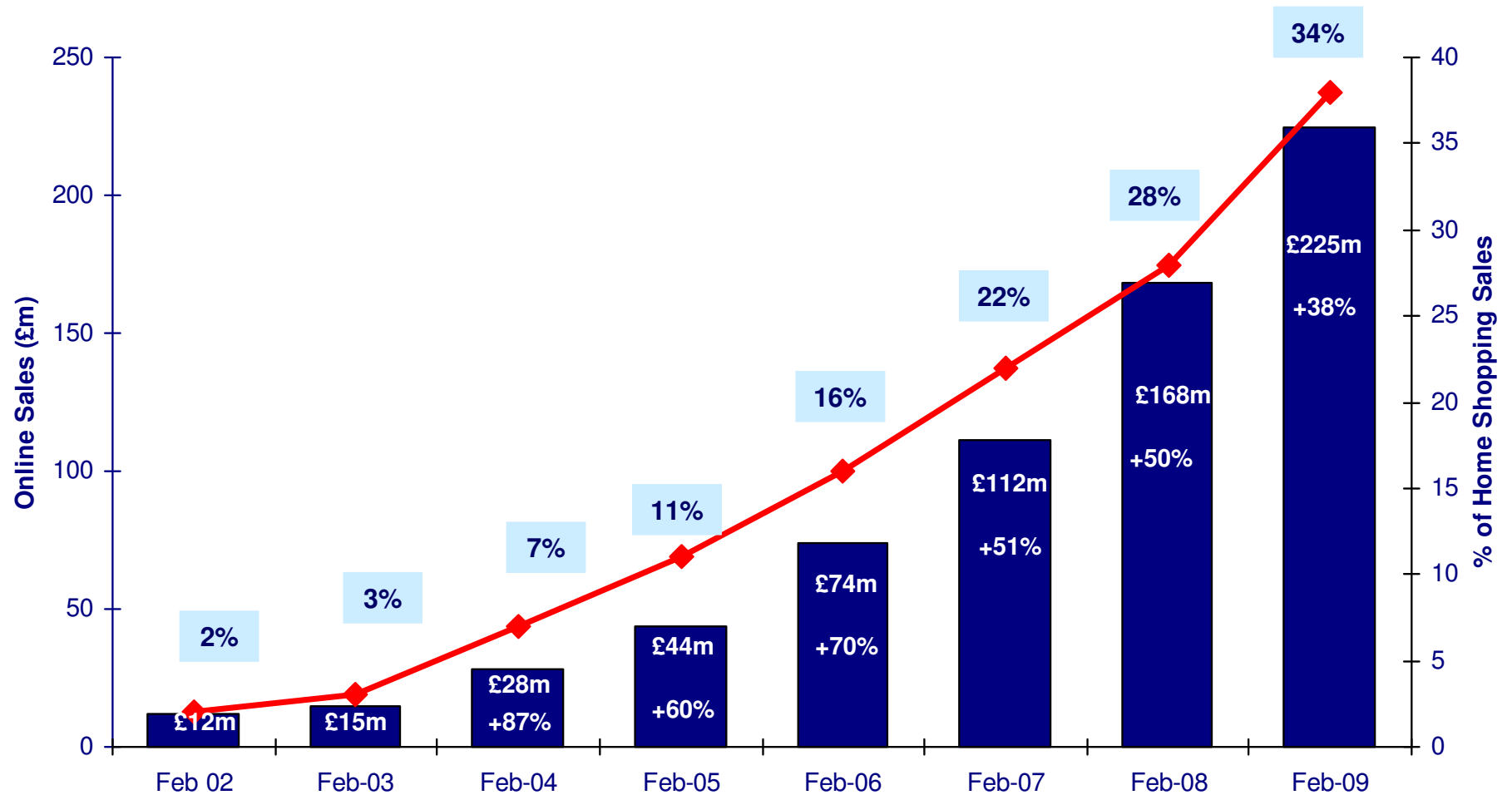
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# Additional Considerations

- Commercial
  - Sub-capacity licensing
  - New application licensing (zNALC)
  - Defined capacity: MSU Capping
- Speed and flexible delivery on zSeries
  - Deploy changes for a proportion of the web sites
- Staffing – still a small team
- Support
  - Few marketplace skills
  - IBM Premium Support essential
  - Access to technical experts (e.g. Caching)
- Issues
  - Granularity of CPs versus speciality engine requirements
  - Cost of memory



# Results



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# Summary

- Met the challenges
- Flexing zSeries
  - Multiple speciality engines
  - Dispatch on both zAAPs and CPs (peak)
  - Compression on or off (MIPs versus Bandwidth)
  - Image serving fallback to z/OS
  - More test environments
  - No increase in staffing
  - Flexing costs (SCRT) for peaks and troughs
- Future
  - Shift http serving to zLinux
  - WebSphere 7



# Thank You for Listening

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# Current Configuration

Java Development Lpar	Production Lpar	Production Lpar	Mixed Environment
Unit Test System Test	Preproduction Production Lpar	Image Servers	Development, Testing Production
JAVA Application Development Instances	Content Management Shop	Image Serving (including video)	Additional WAS Applications
Multiple Cells HTTP APP Servers	Multiple Cells HTTP APP Servers		
WMQ WAS DB2 z/OS	WMQ WAS DB2 z/OS	Linux	WAS DB2(UDB) z/Linux z/VM
Hardware : 4 x GP 4 x zAAP 1 x zIIP		1 x IFL	1 x IFL



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