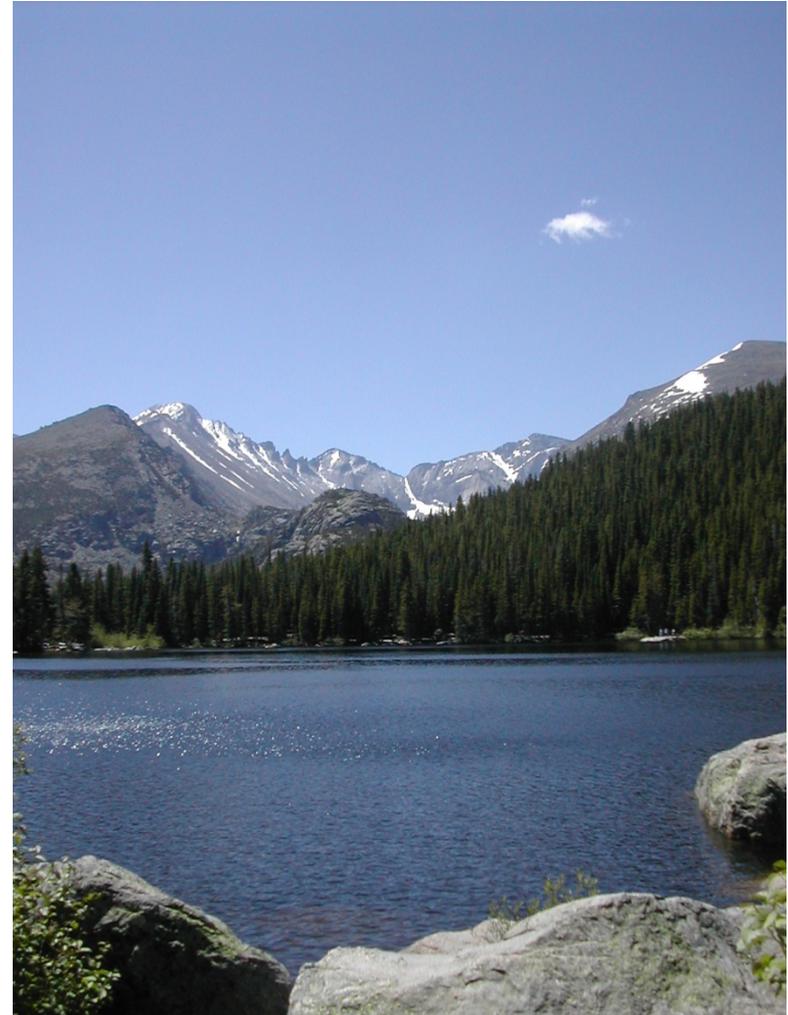


Achieving Best in Class Software Savings through Optimization not Negotiation

August 10, 2012



- Introduction
- Industry Trends
- Best in Class Software Asset Management
 - How good is best in class?
 - How did they get there?
 - How good can they get?
- Conclusion

Thesis Statements

- The software Industry is changing through: vendor consolidation, data center consolidation, outsourcing, changing pricing metrics, budget constraints.
- It is possible to take advantage of the changing software industry to reduce your unit cost.
- Best-in-Class companies focus on product management to reduce unit cost.
- Software Unit costs can be further reduced by 40% for Best-in-Class companies.

ISAM's software industry pricing practices & trends research comes from.....

A database that took over 100 full-time employee years to build!

- Over 100 million product usage data points
 - ✓ 26,242 asset names
 - Every mainframe product classified among 422 product categories
 - Each product shows every available product alternative
 - ✓ 2372 software vendors
 - IBM, CA, BMC, SAS, Compuware, Oracle, HP, Symantec, VMware etc.
- Over 8 million customer pricing data points
 - ✓ Industry best in class pricing by product
 - ✓ Industry best in class by category
- Over 1000 major corporations
 - ✓ 13 major outsourcers
 - ✓ 4 of the Top 5 global IT consulting companies
 - ✓ 5 of the Top 10 global corporate brands
 - ✓ Largest U.S. & Canadian Federal & state agencies
- Tied to ISAM proprietary IBM & ISV vendor pricing applications

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Industry Trends - 1997

- Many software vendors
- Little correlation between data center size and unit cost
- Lots of products
- 5-7 year ELAs representing 70% of ISV budget
- Pricing based on MIPS or Tiers
- Little product substitution (high vendor retention level)
- Lots of CPUs and data centers
- Costs managed thru negotiation
- Average costs at \$5500 per mip
- Best in class at \$2500 mip

Industry Trends - 2011

- Fewer software vendors
- IBM is in the replacement business
- High correlation between data center size and unit cost
- Reduced products
- 2-3 year ELAs representing 80% of ISV budget
- Pricing based on MIPS, Usage, Sub-capacity, value units
- High product substitution (low vendor loyalty)
- Consolidate CPUs and data centers
- Costs managed thru product management
- Average costs at \$4206 per mip
- Best in class at \$910 mip

SAM Challenges

- Incomplete data
- Inaccurate data
- Cost reduction focused on rates
- Costs managed by departments not responsible for software budget
- Customer requirements to maintain high inventory level
- High rate of product uniqueness

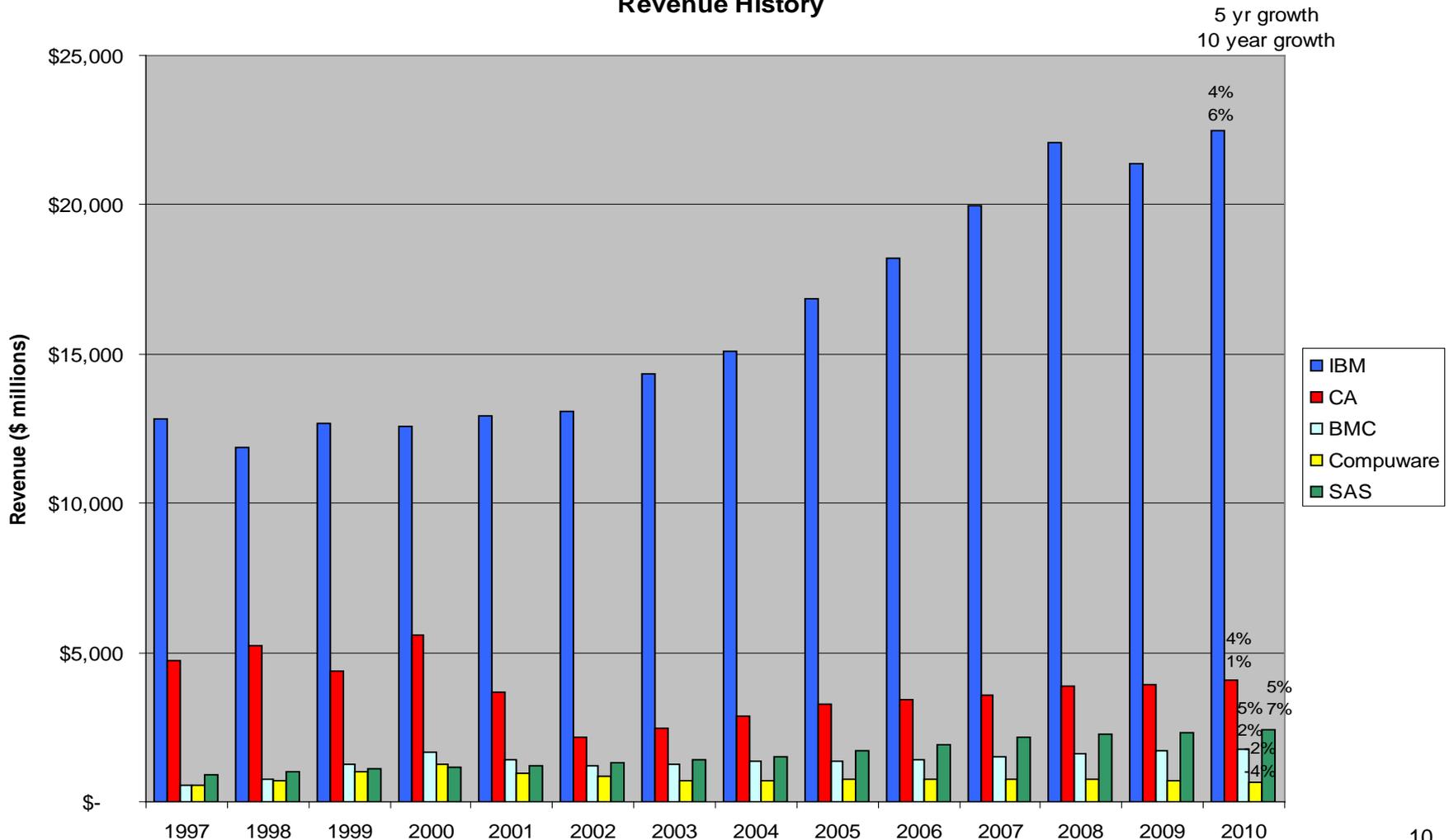
Observations of Common Software Asset Management Practices

1. SAM starts with the contract
 - a. Legal and Financial processes are set up to manage contract compliance
 - b. Database designed to ensure license compliance
2. Procurement is set up to manage vendors
3. Inventory management is tactical
4. Hardware decisions are made with limited software cost analysis
5. Costs are managed by negotiating rates
6. Unit cost
 - \$4206 Average
 - \$910 Best in Class

How much are the software vendors growing?

IBM has taken 81% of Top 5 vendor's increased revenue

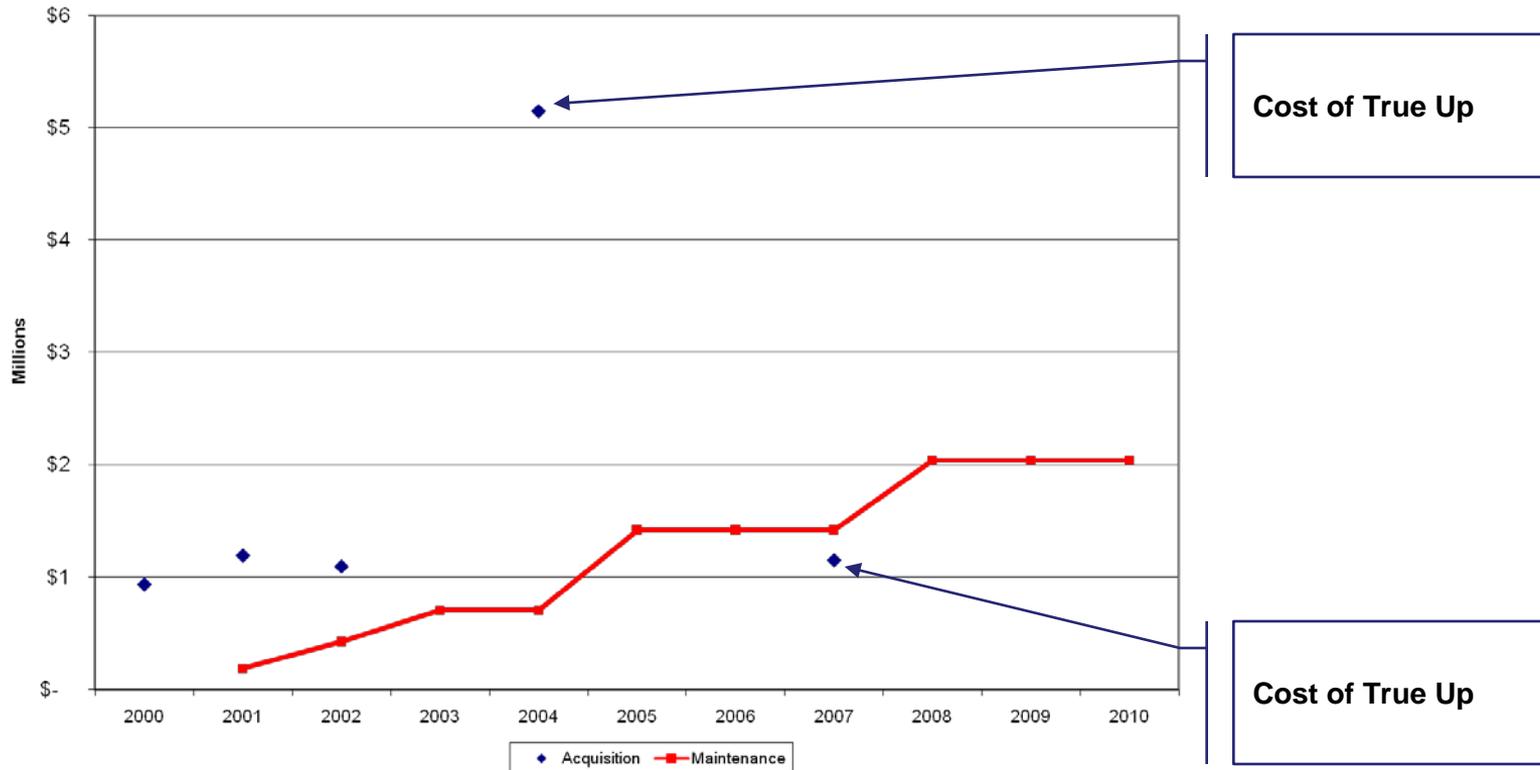
Revenue History



Software costs are aligned to an outdated paradigm of managing hardware & software as separate discrete assets

Current license management processes result in significant unplanned expenses related to the cost of true-ups and the subsequent jump in maintenance prices.

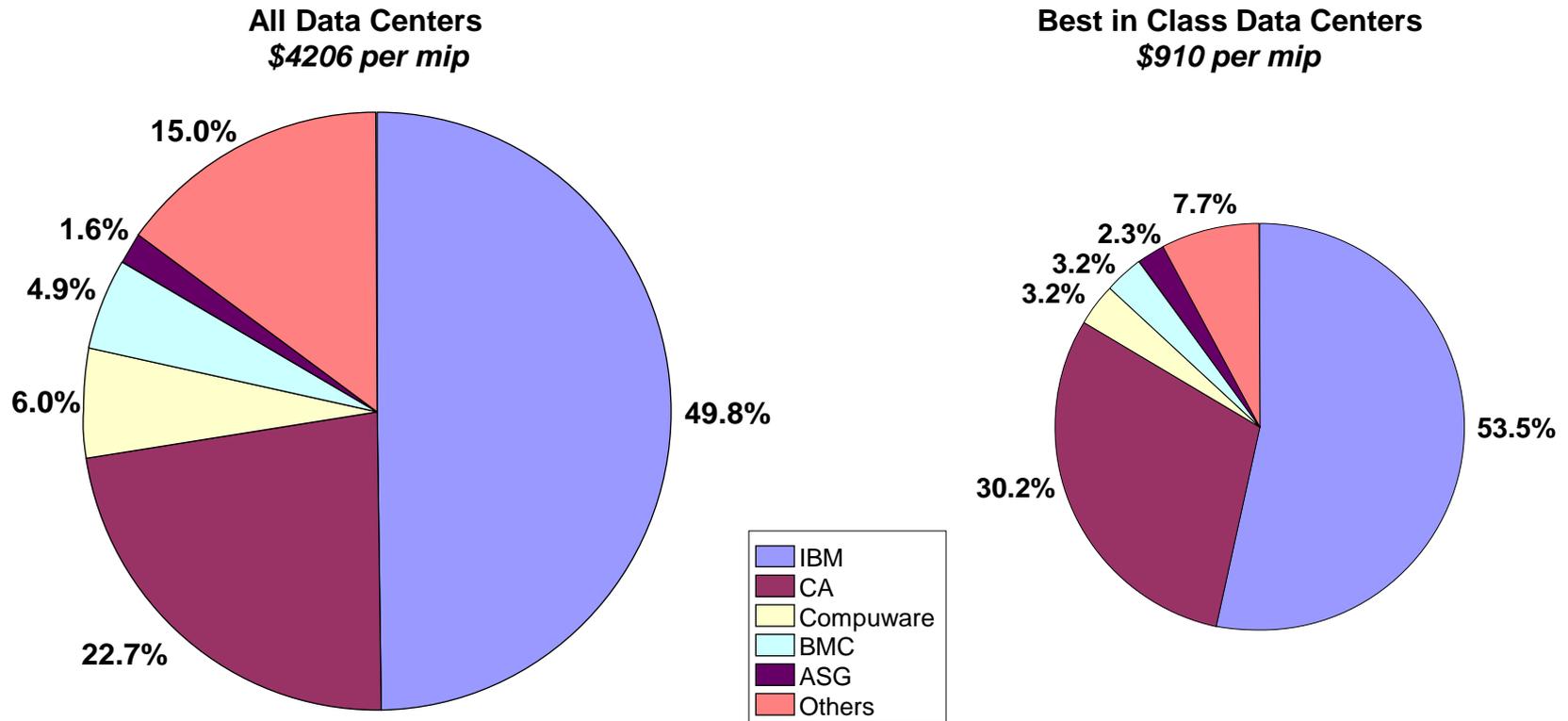
Distributed Annual Software Costs



Best in Class data centers have higher concentration of costs on IBM & CA

Most data centers can cut their software costs in half by getting to best in class.

Market Share by Vendor based on customer spend

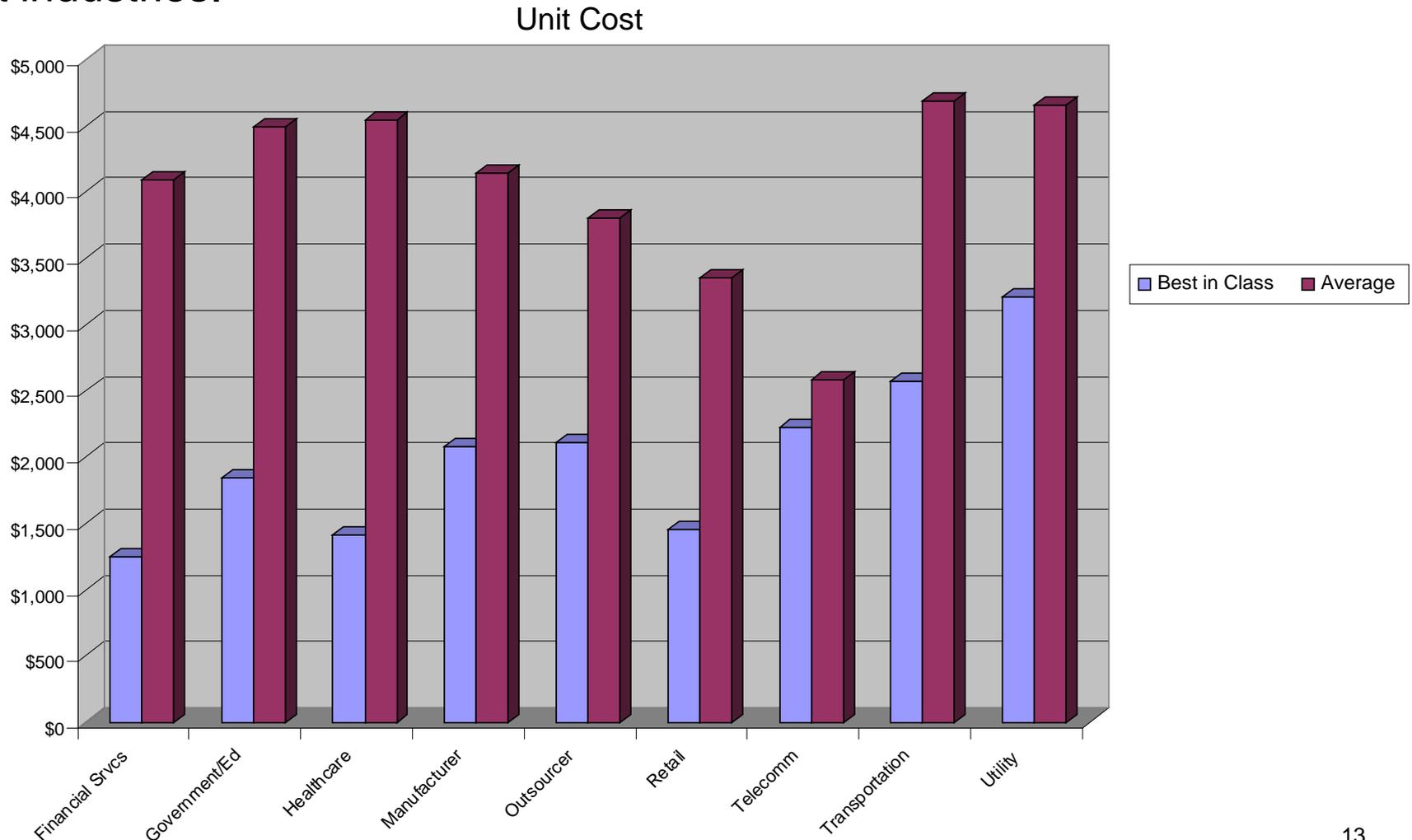


****Note****

Best in Class represents 3 lowest cost data centers

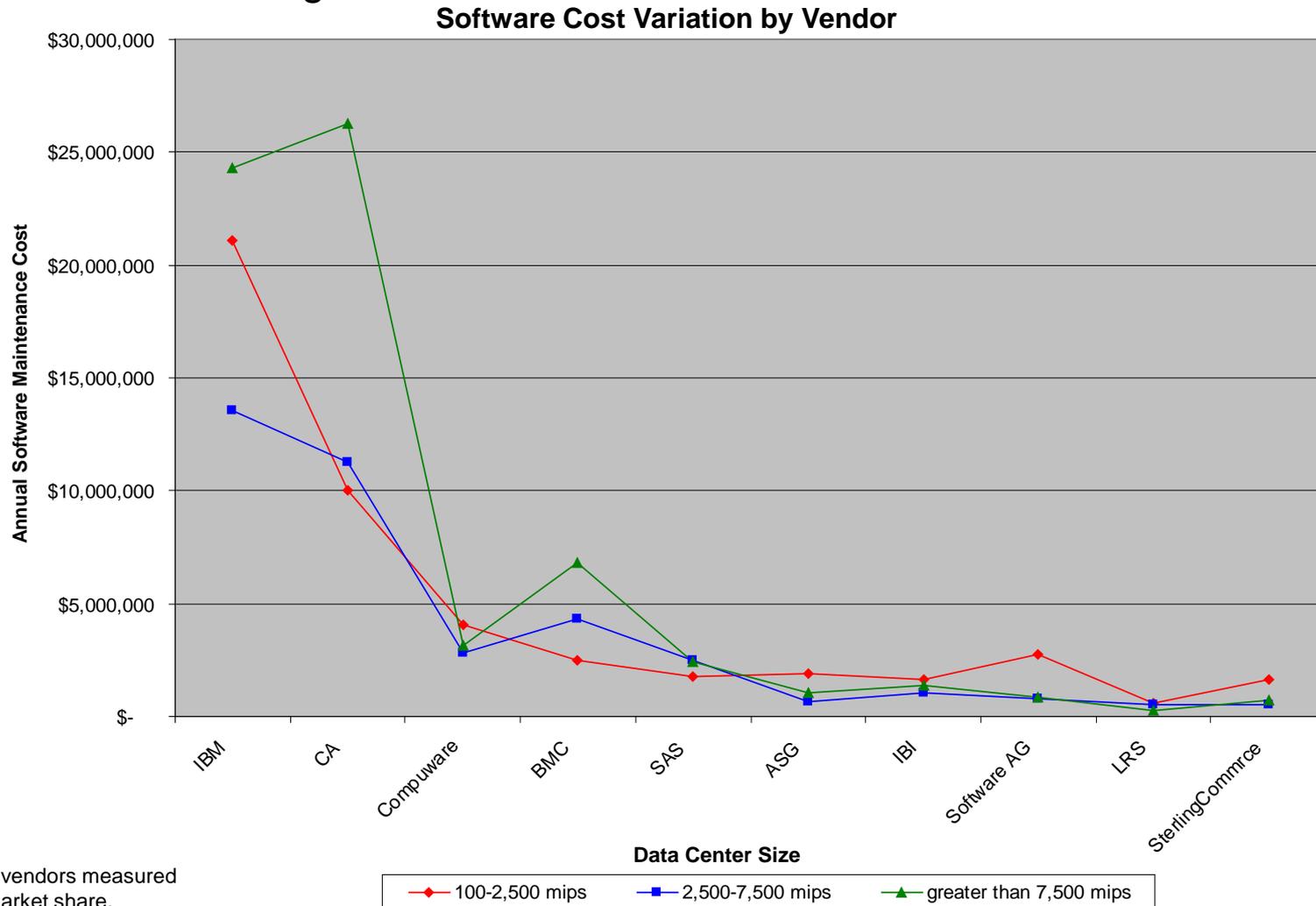
Average Unit Cost varies slightly across all industries

Best in Class spend less than half of an average data center in most industries.



Disparity in vendor costs result in dramatic cost variances. The variance is greatest with CA at over \$25 million.

Not knowing the price disparity among vendors can cost a data center millions in lost savings.

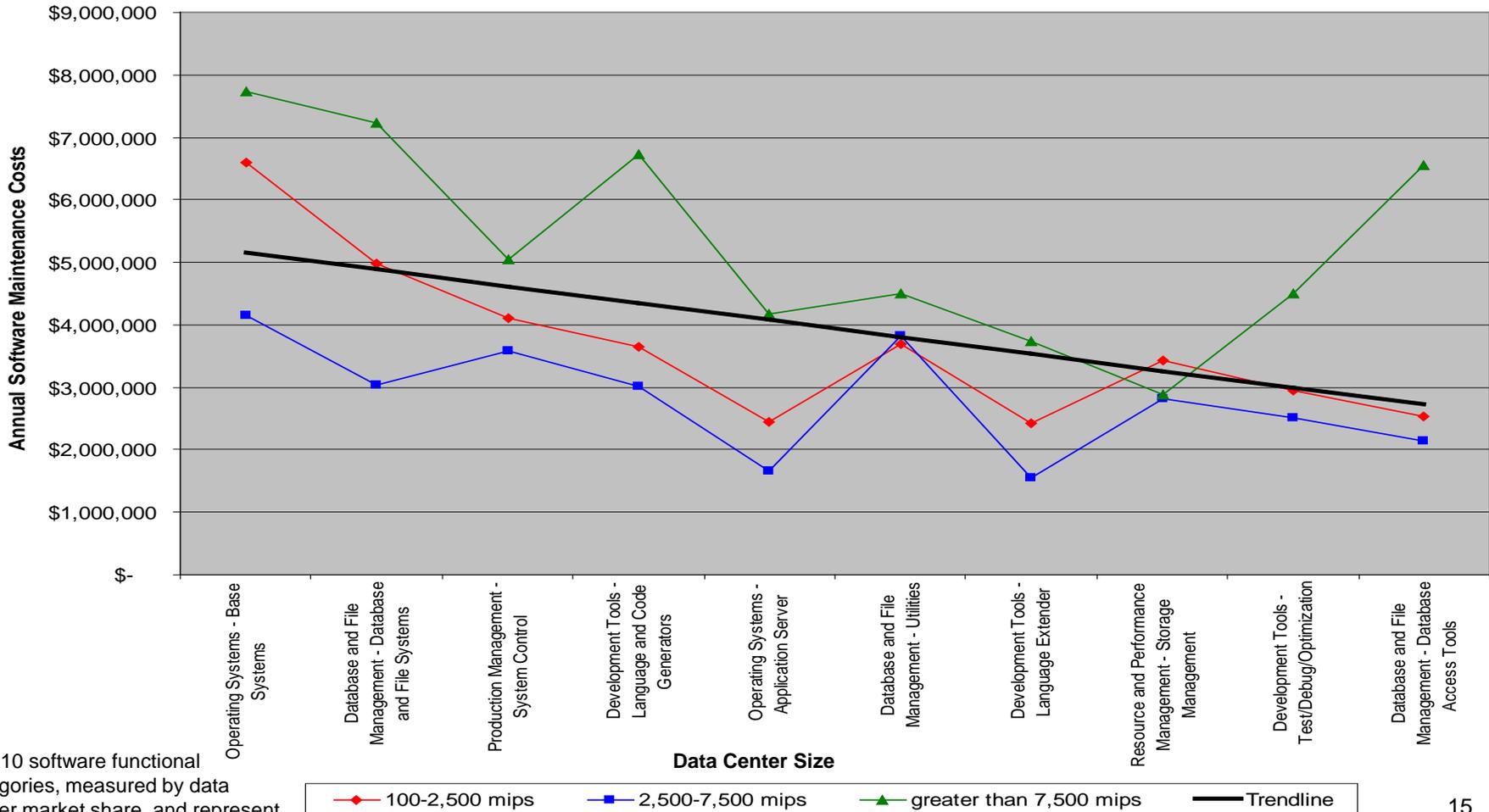


Top 10 software vendors measured by data center market share.

Disparity in software costs by functional activity are dramatic. The variance is greatest with the largest categories and Database Access Tools.

Data centers can save millions in each of the Top 10 functional categories.

Software Cost Variation by Functional Category

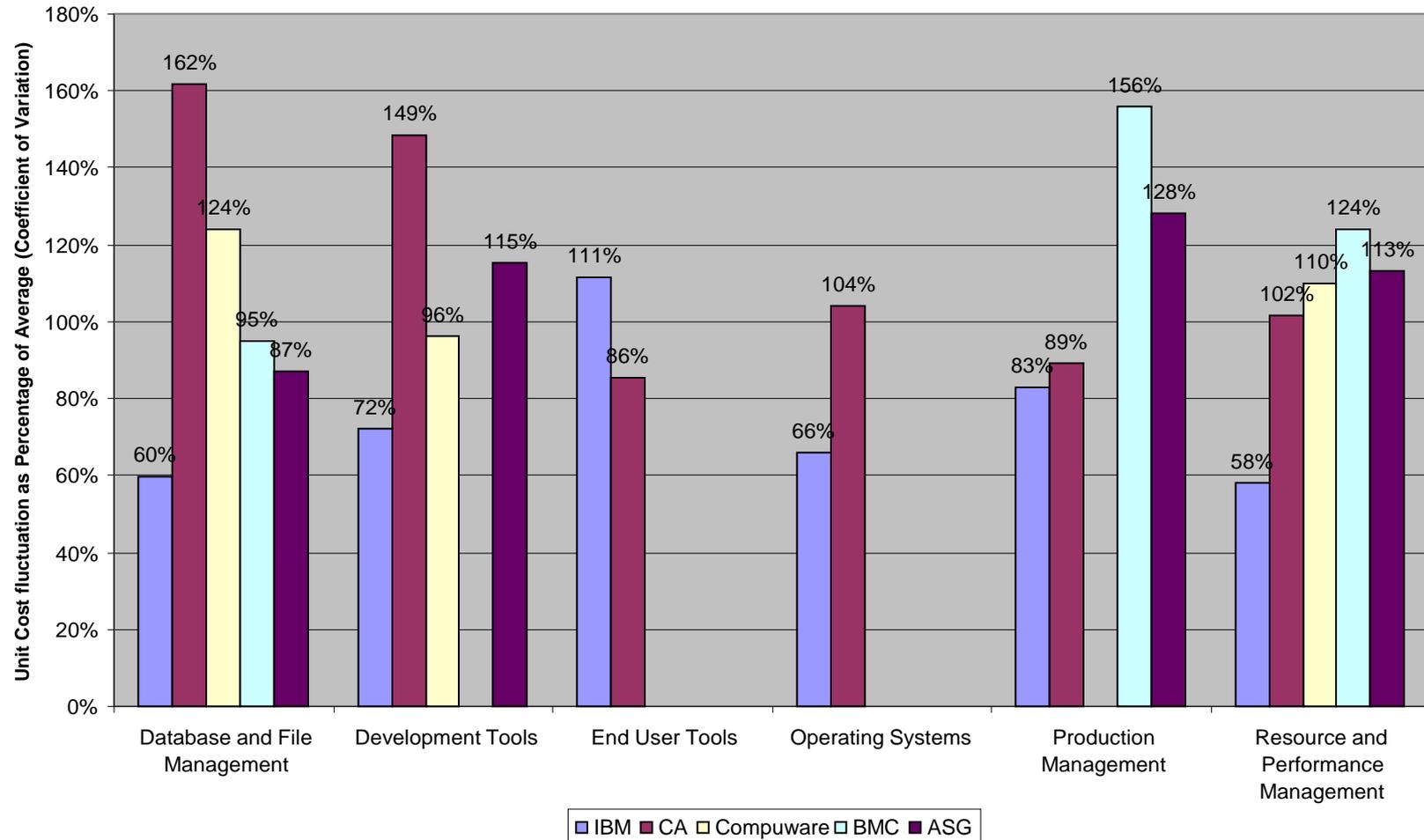


Top 10 software functional categories, measured by data center market share, and represent 57% of total software costs.

CA & BMC each have the greatest price variation of ISVs in 2 of the 4 categories where ISVs compete

Knowing the pricing variation for each category by vendor, millions in savings can be realized during negotiation.

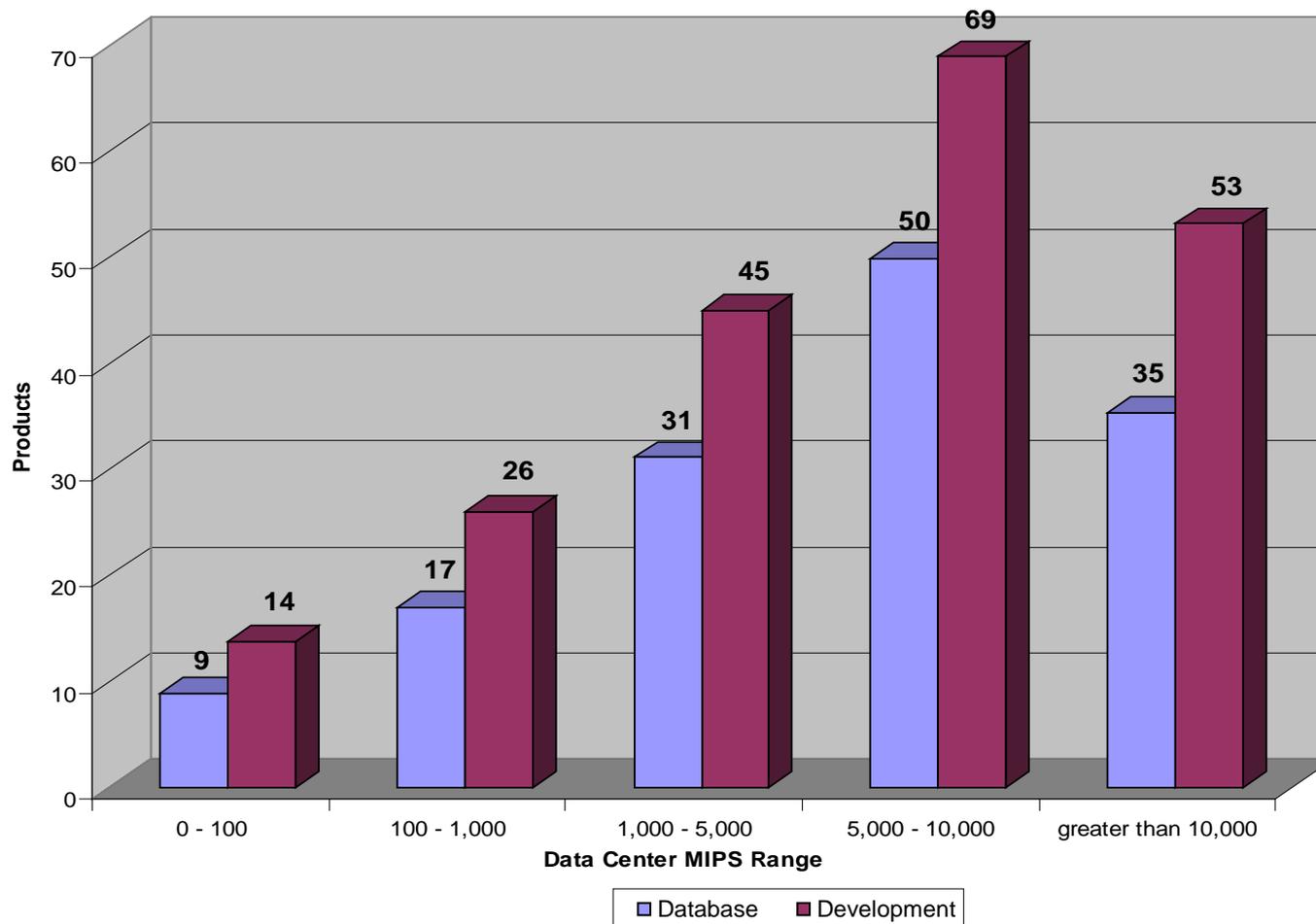
Large Data Centers



Database & Development products grow with data center size

The growth in Development and Database products provide savings opportunities through product standardization and vendor consolidation.

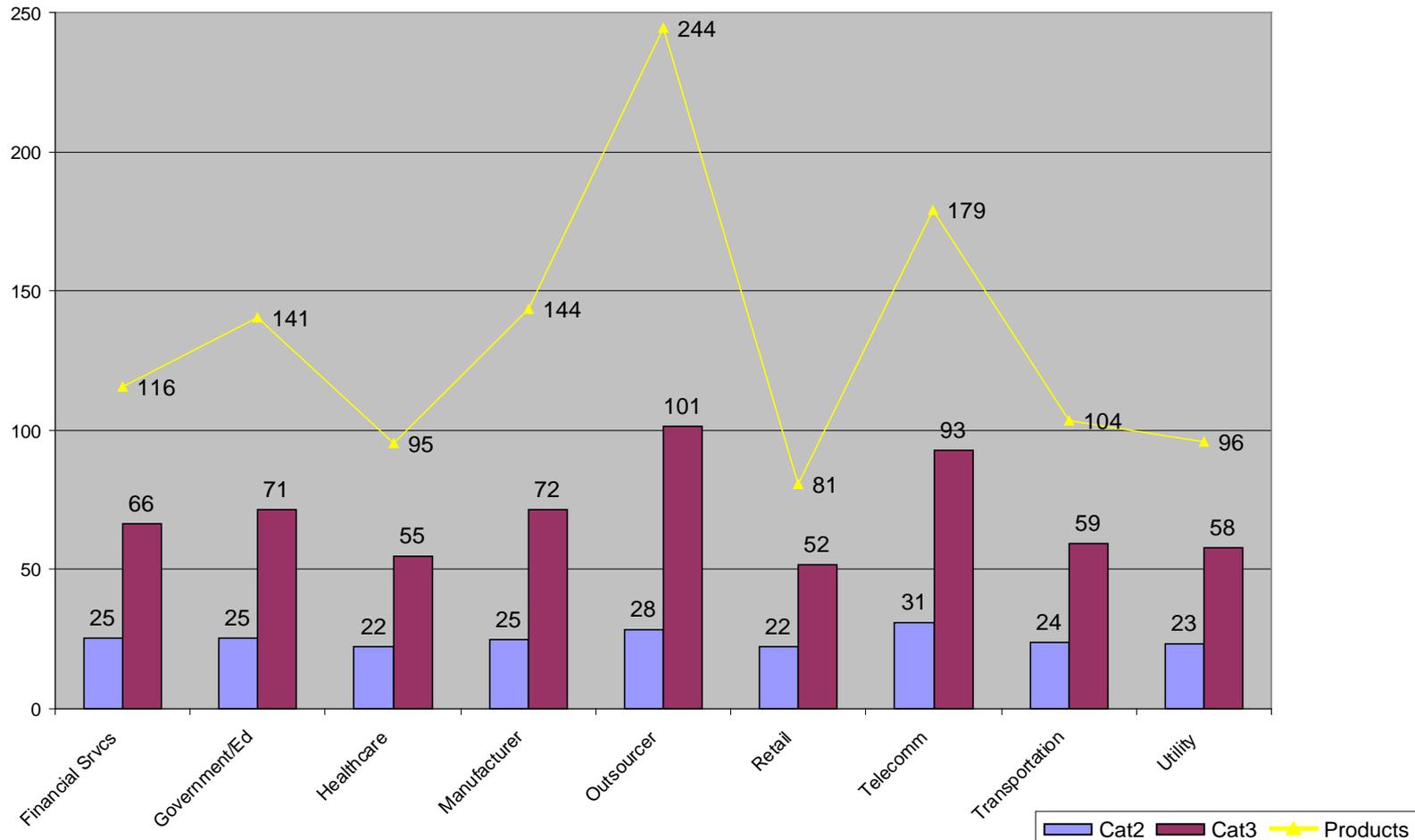
Product Count by Environment



Industries have comparable number of licensed core functionalities in spite of varying deployed products

Large number of unique functional activities provide opportunities for significant savings thru product consolidation and data center optimization.

Comparison of Products to number of Functional Categories



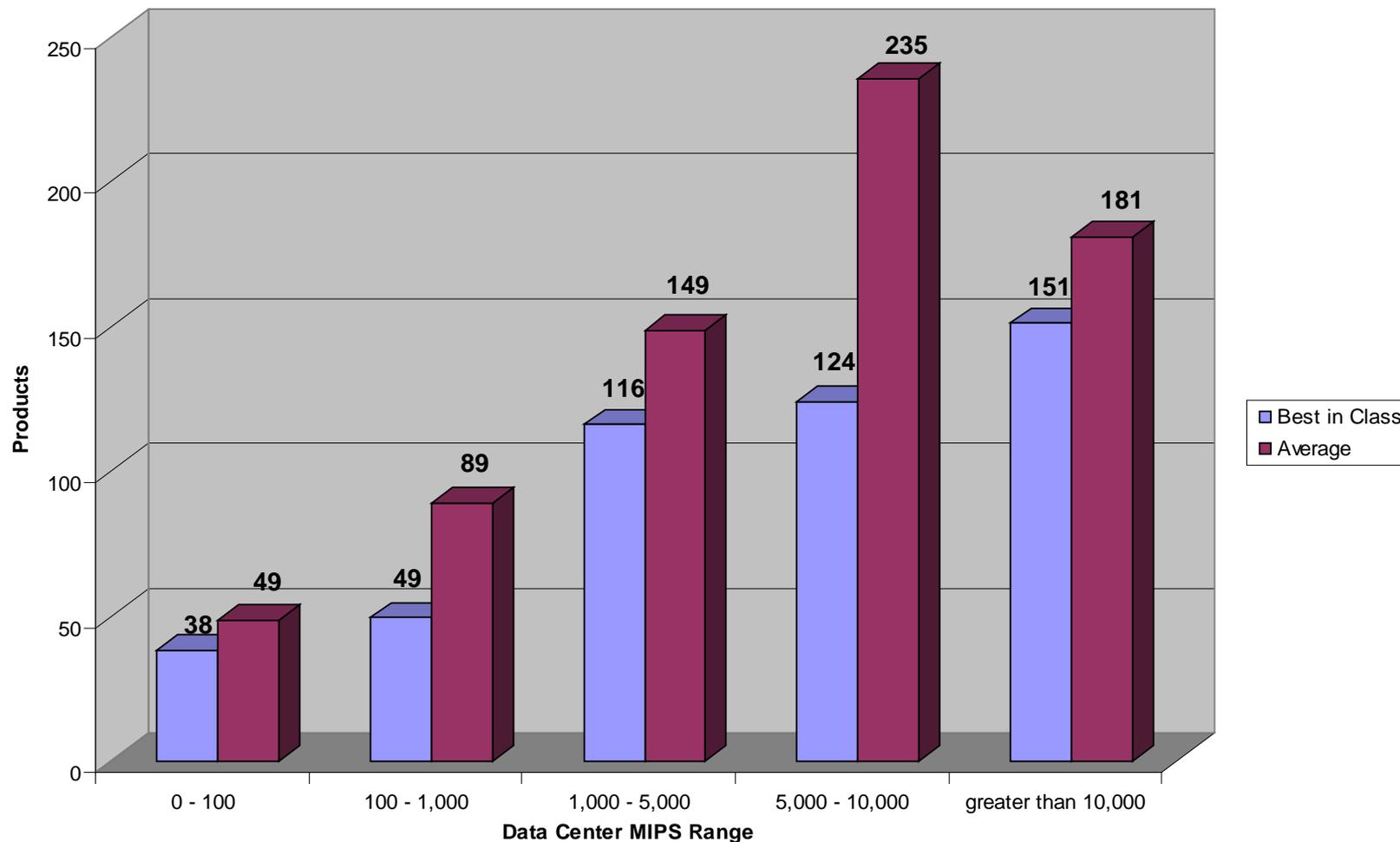
All mainframe products are categorized into 80 different L2 & 422 different L3 functional categories.

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How Good is Best in Class?

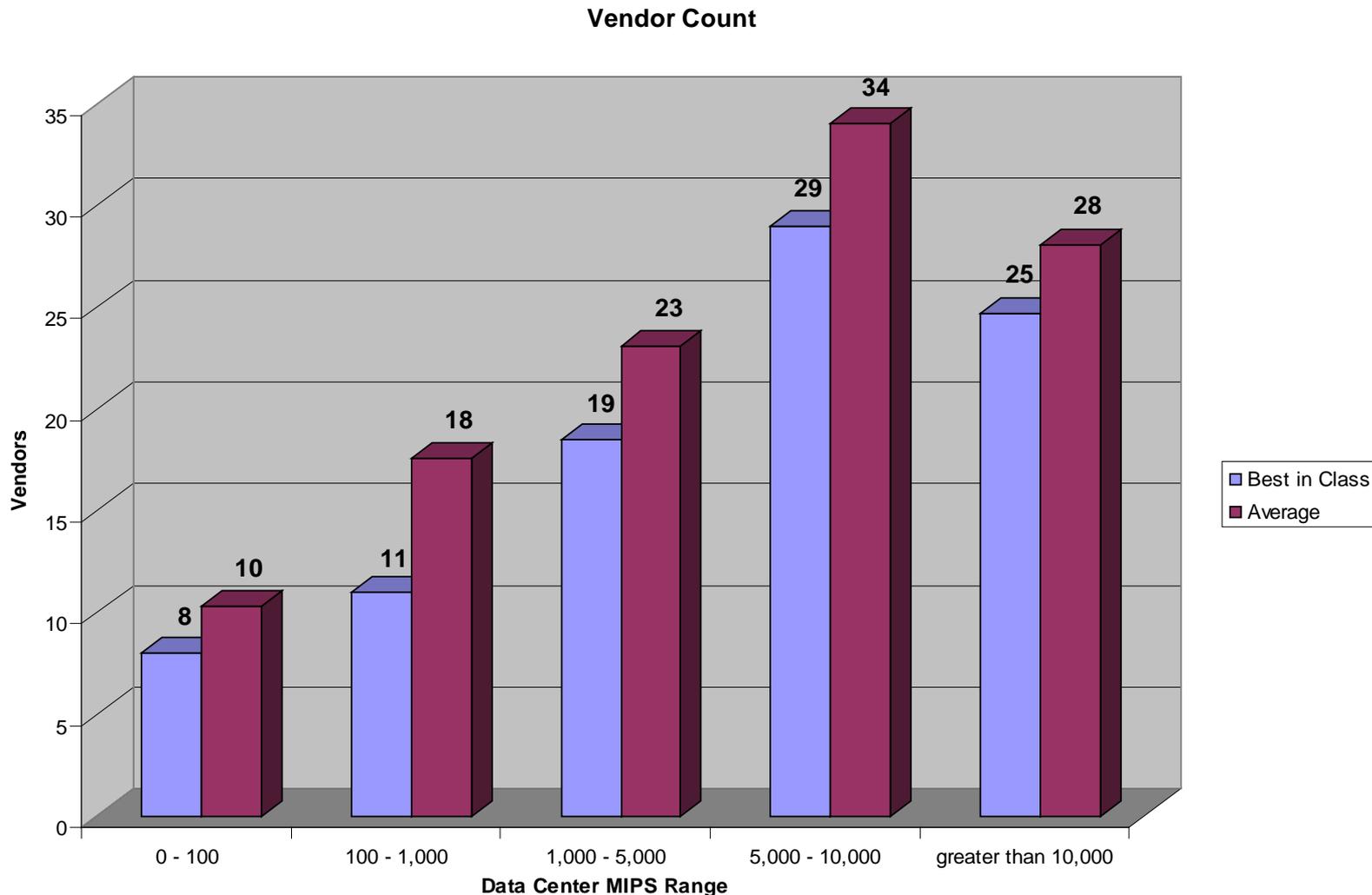
Although larger data centers have more products ...

Product Count



How Good is Best in Class?

and larger data centers have more vendors ...



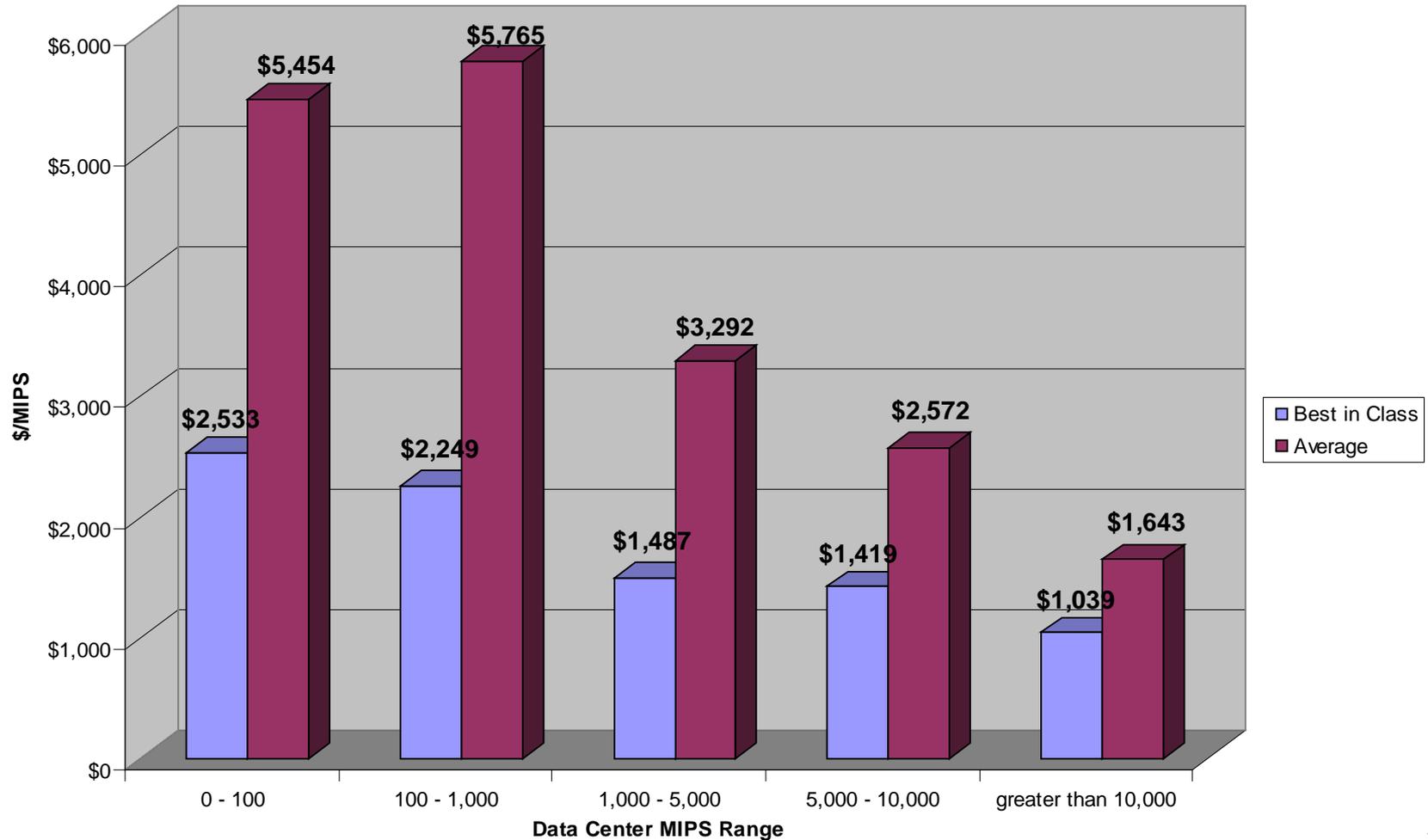
How Good is Best in Class?



software asset
optimization

Large data centers have lower unit costs.

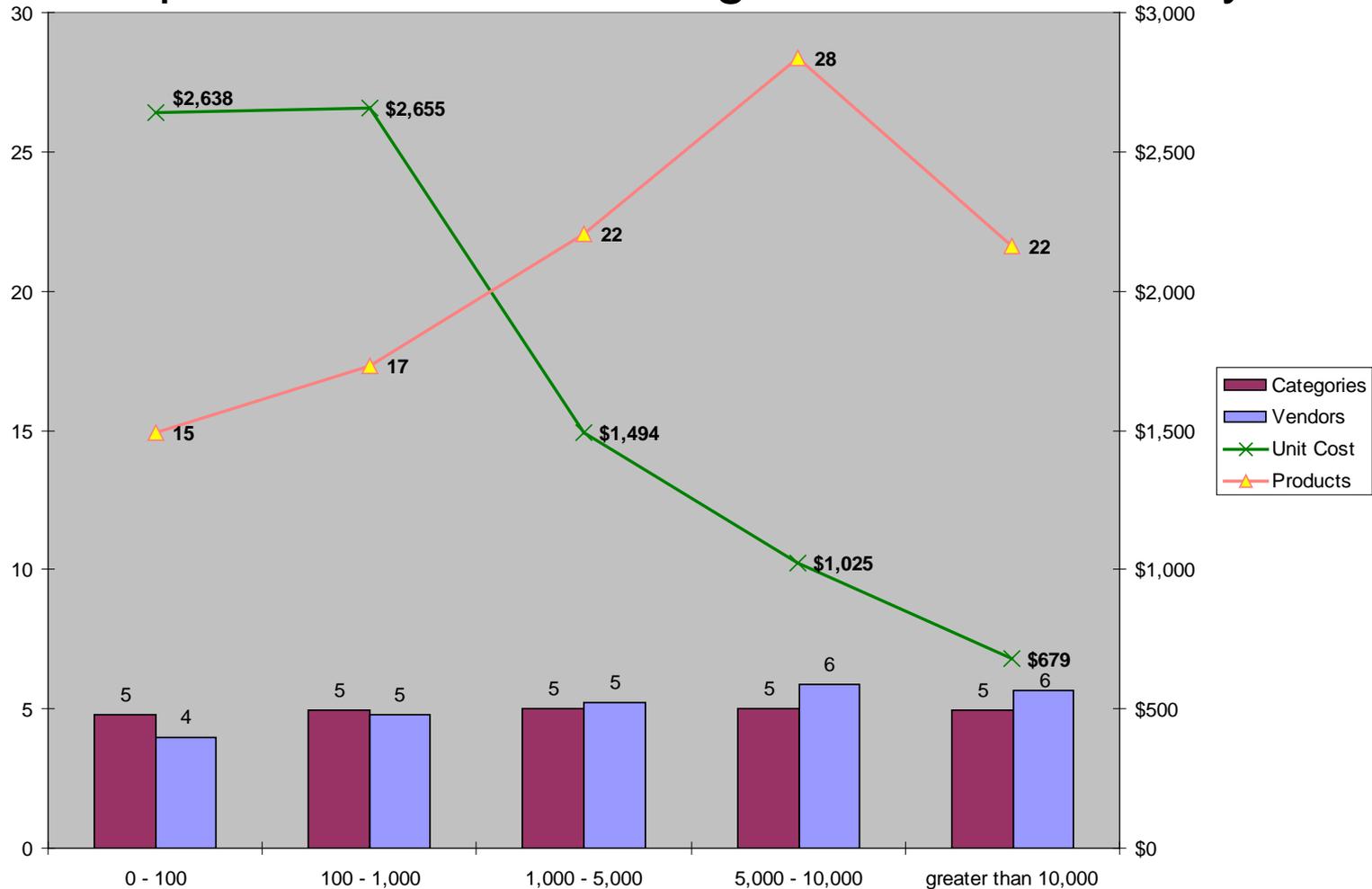
Unit Cost



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How did Best in Class get there?

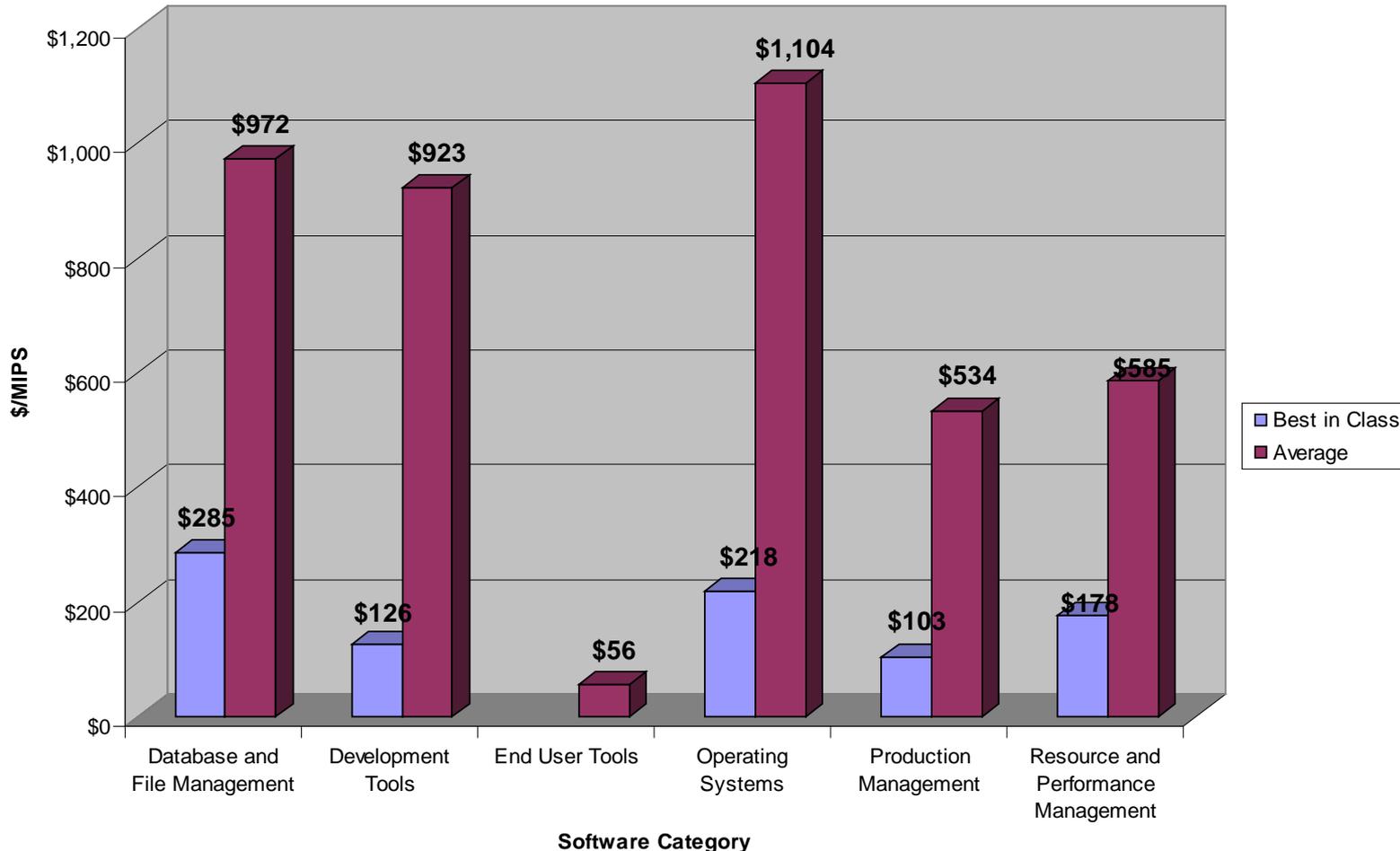
Larger data centers are able to reduce the costs of their core products without losing critical functionality



How did Best in Class get there?

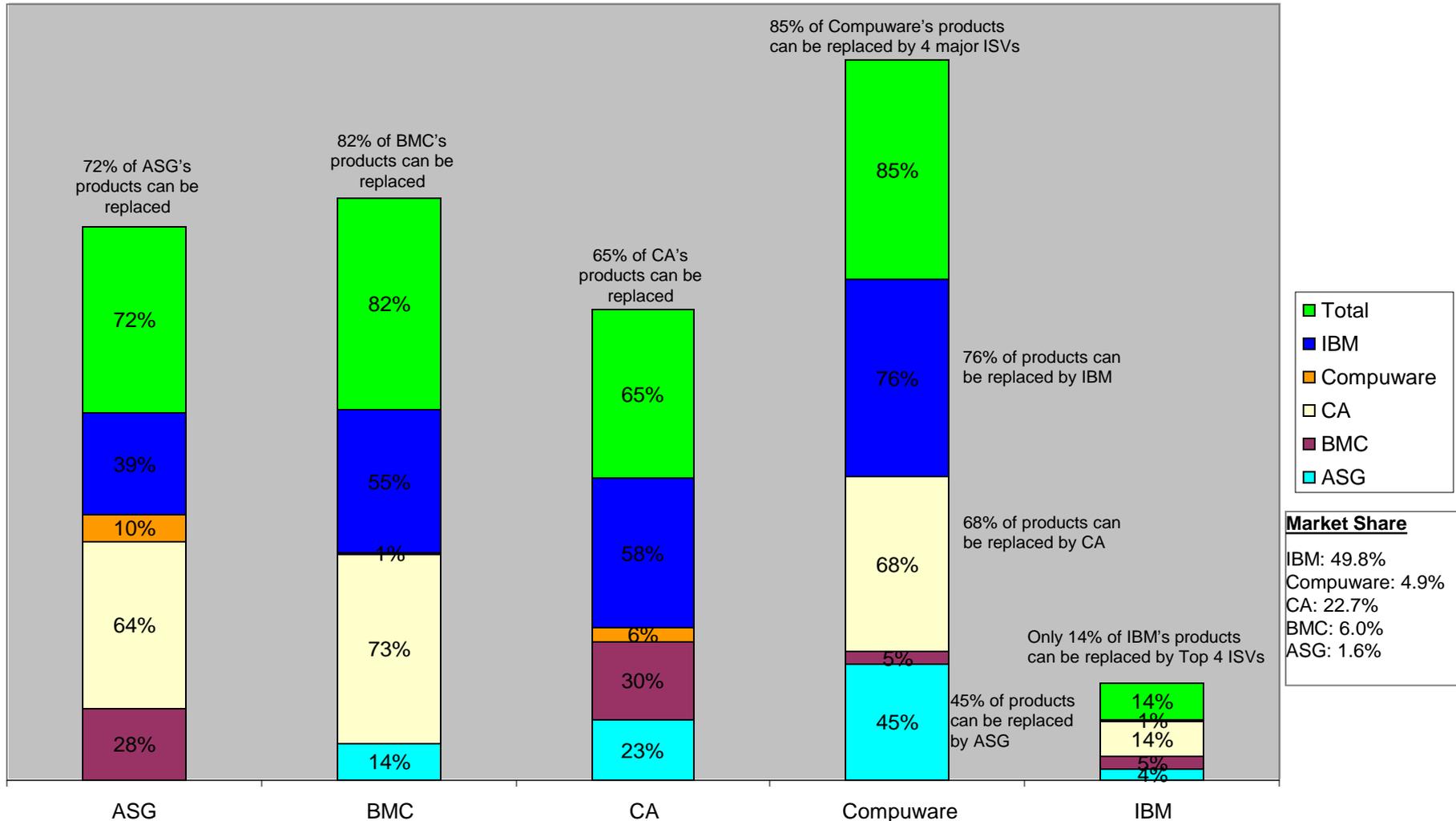
BIC drive costs down across product functionality

Unit Cost by Category



BIC utilize product alternatives to reduce software costs - Compuware has the greatest percentage (85%) of installed products which can be replaced – IBM has the least (14%)

Product Substitution
Percentage of Installed Products (by cost) that can be replaced by Competitor

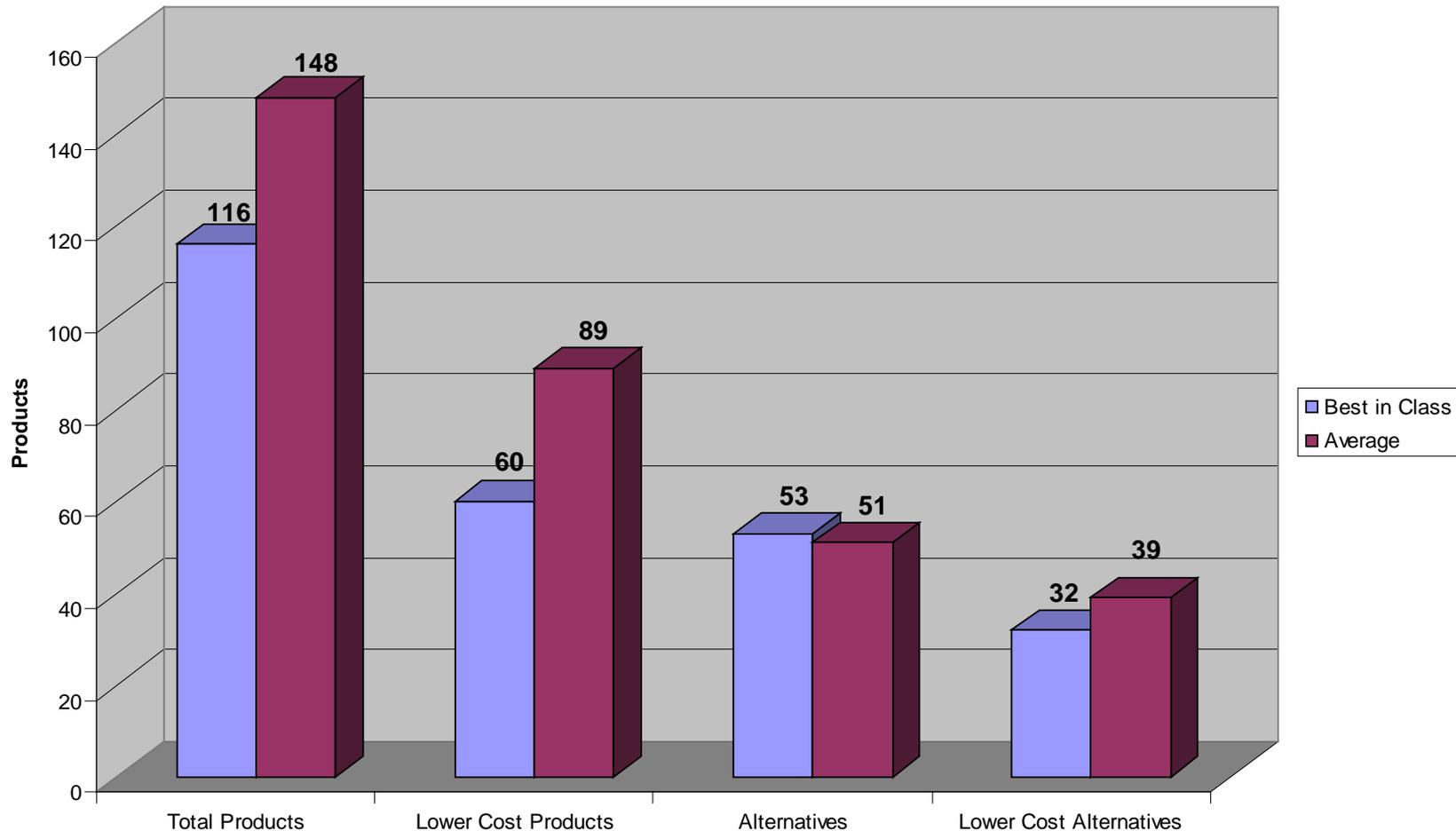


****NOTE****
 Replaced products measured by cost

Small Data Centers: 60% of installed products are available at a lower price

Best in Class have 29 fewer lower cost products

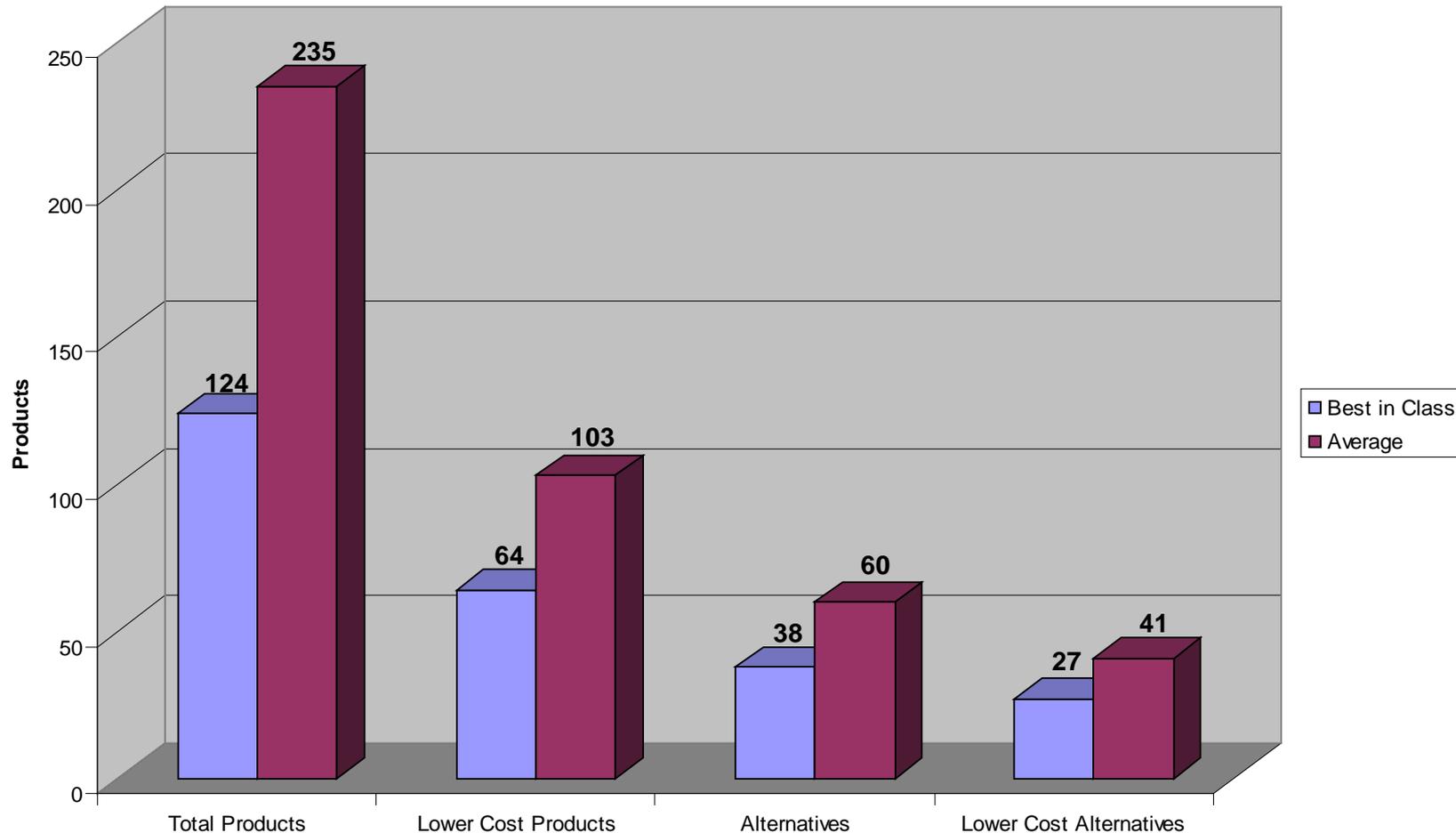
Product Pricing Summary
1,000 - 5,000 MIPS



Medium Data Centers: 44% of installed products are available at a lower price

Best in Class have 39 fewer lower cost products

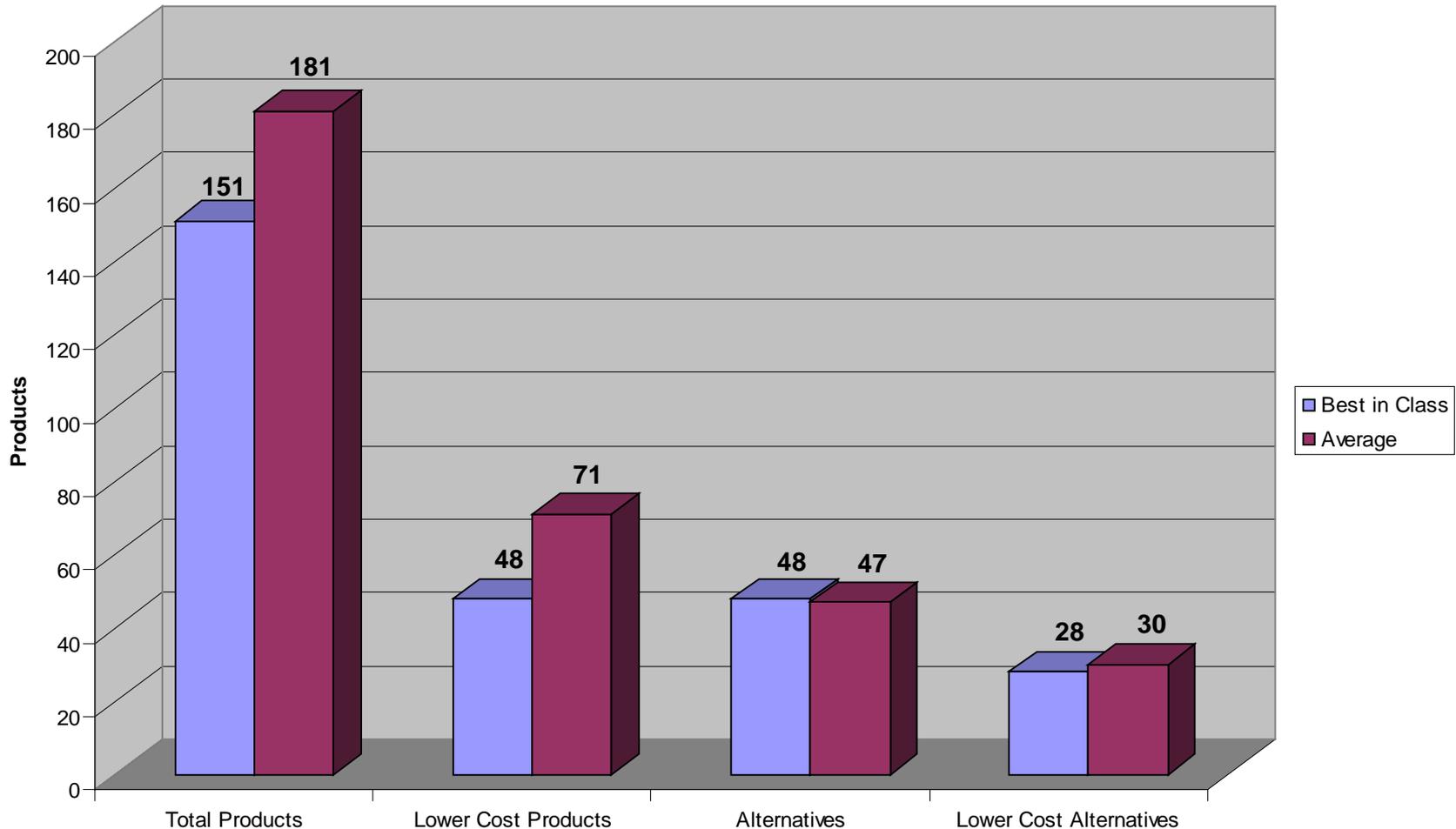
Product Pricing Summary
5,000 - 10,000 MIPS



Large Data Centers: 39% of installed products are available at a lower price

Best in Class have 23 fewer lower cost products

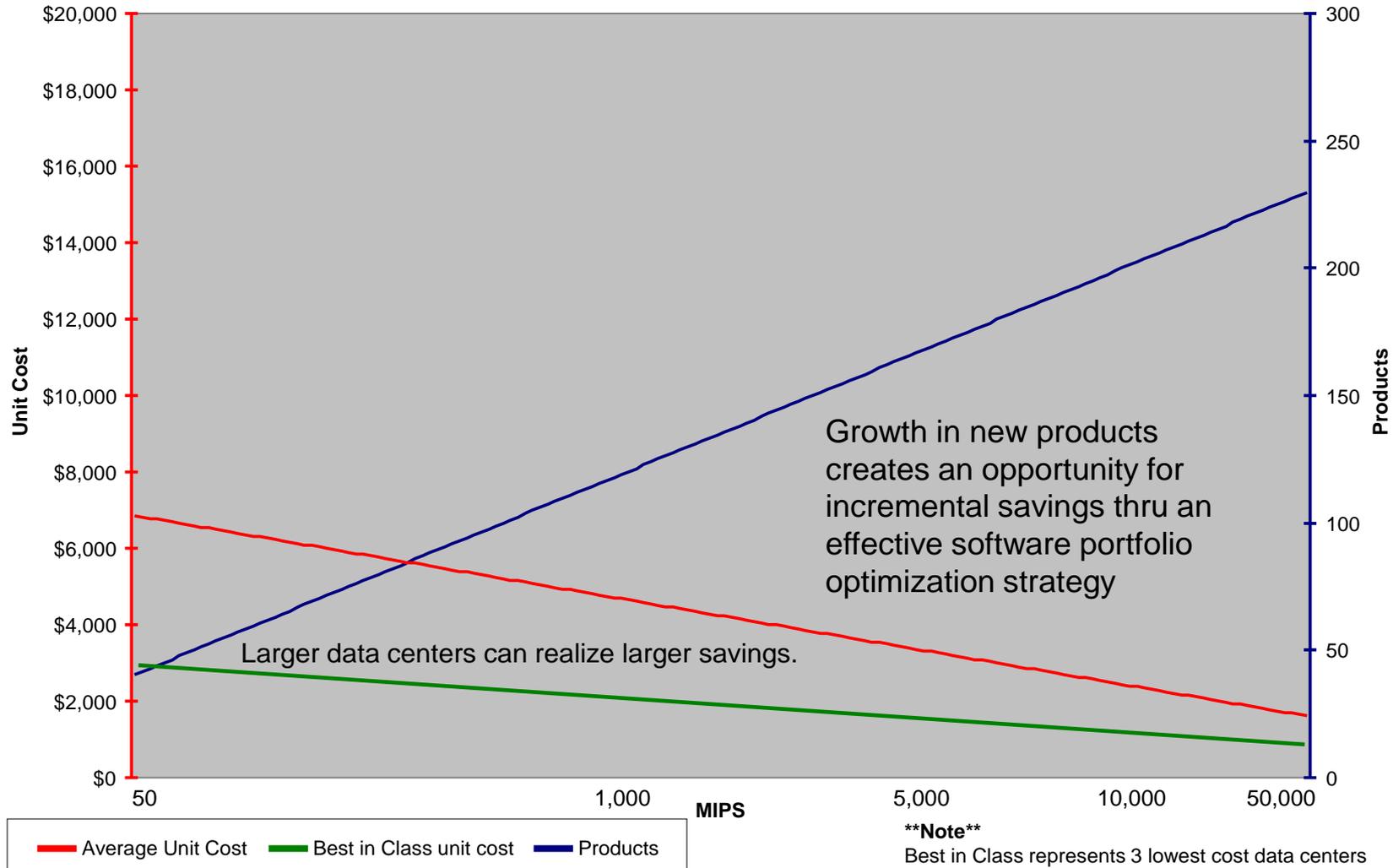
Product Pricing Summary
greater than 10,000 MIPS



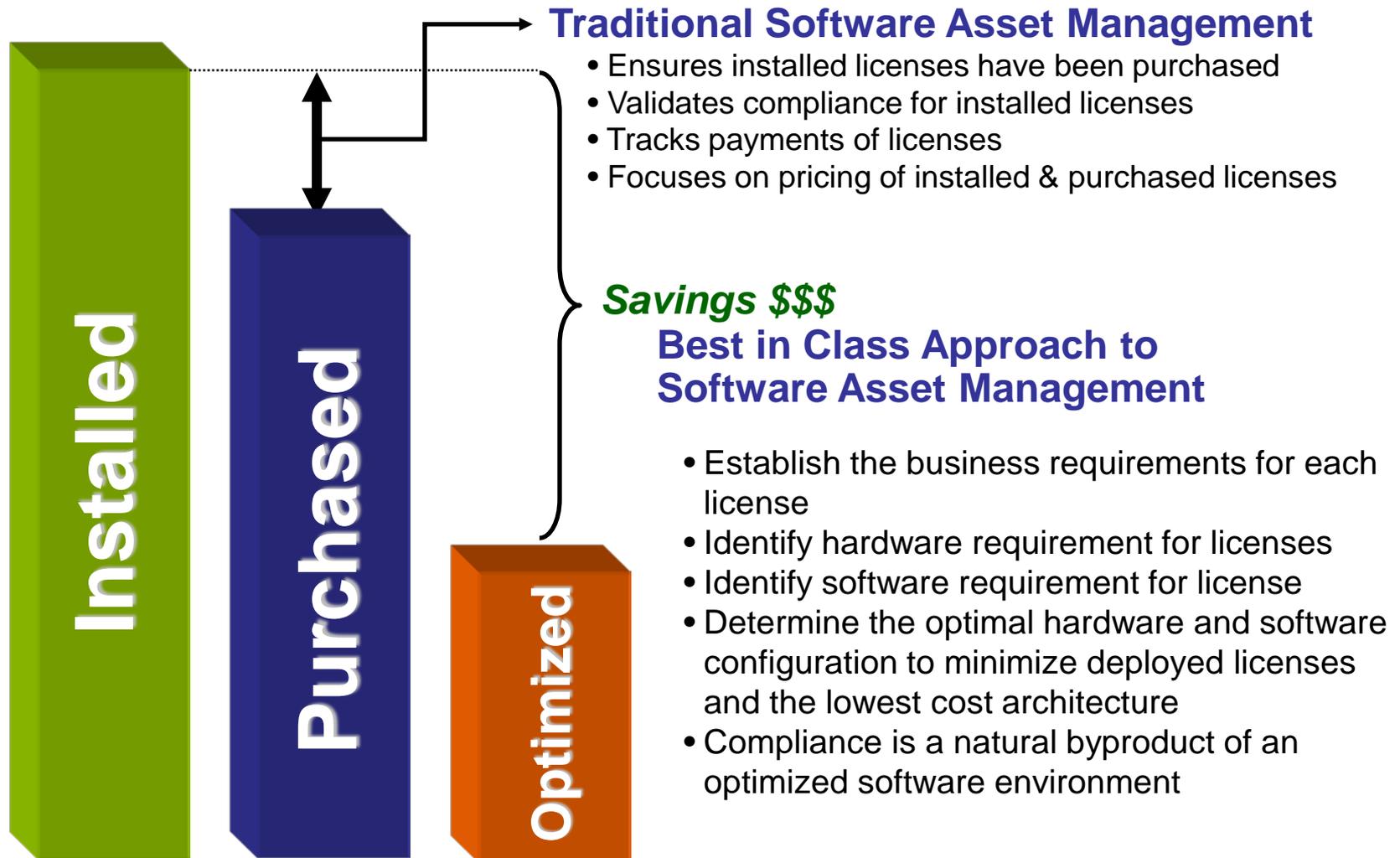
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Best in Class data centers consistently pay less than half of an average data center

BIC are approaching \$600 (£375) per MIP



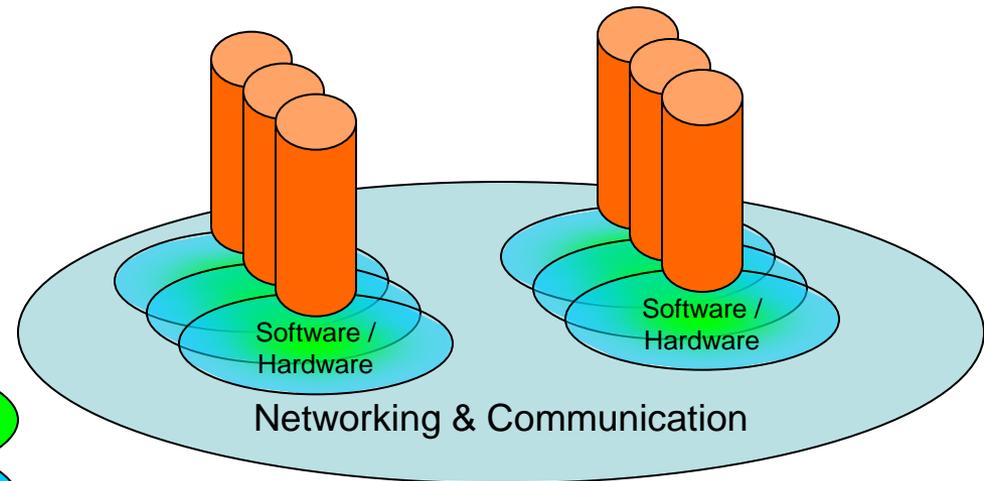
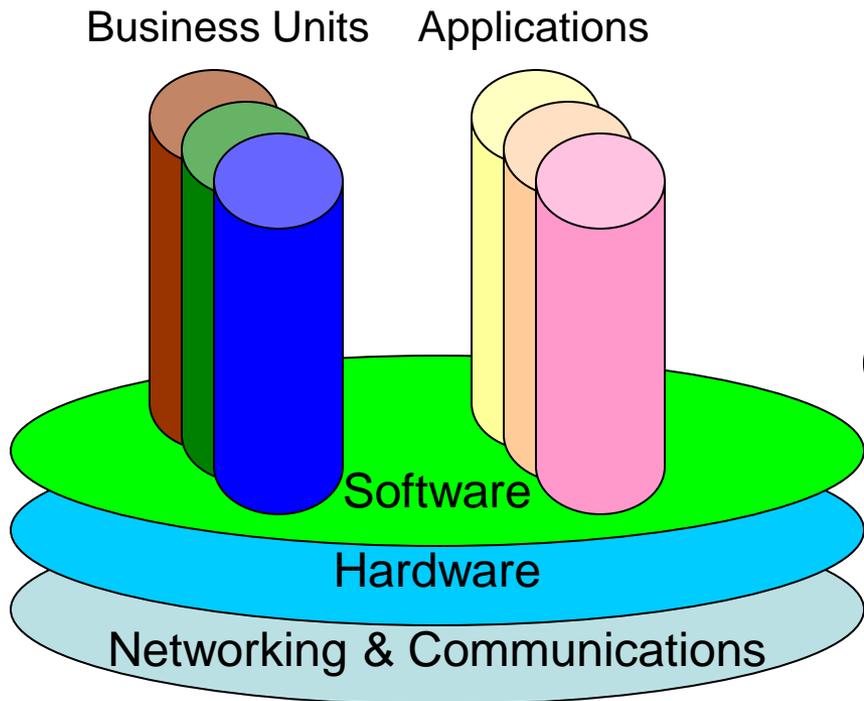
Best in Class software asset management focuses on optimization



BIC create discrete IT infrastructure of hardware and software for each Business Unit or Application

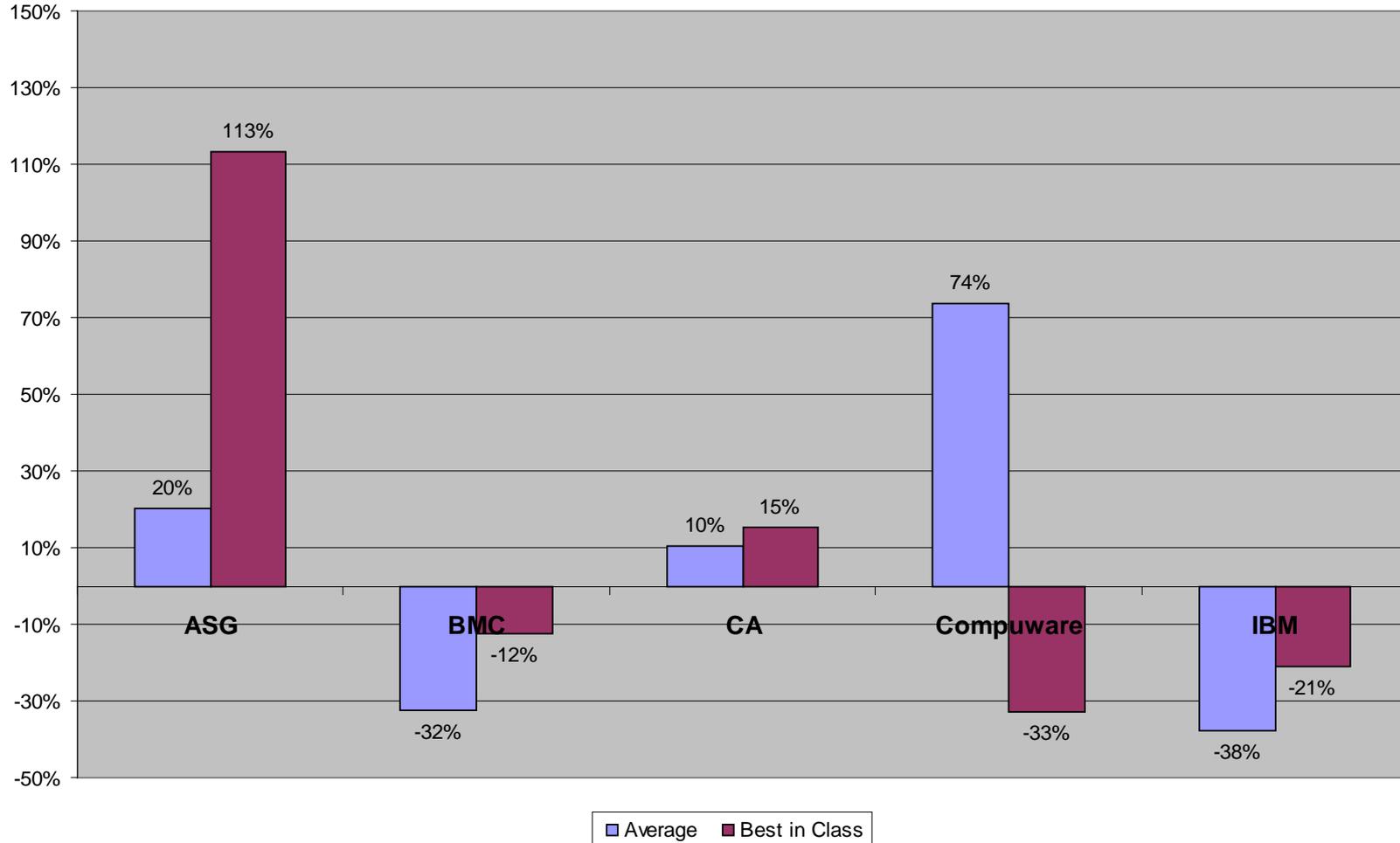
Traditional IT Software Perspective manages software as an independent asset from hardware. Hardware is standardized across all business units and applications.

To minimize software TCO, software & hardware need to be managed as a single asset. Each asset supports either a business unit or application. Hardware standards may be unique to each business unit or application.



When considering vendors to migrate to, IBM is consistently a lower cost alternative – CA is consistently more expensive

Price Difference in Migrating to another Vendor
Comparison of Average and Best in Class Pricing



When managing software costs, BIC consider lower cost product alternatives to either migrate to, or as negotiation leverage with current vendor



Best in class pricing from lowest cost alternative is 73%-95% lower than industry average pricing.

	<u>Product A</u>	<u>Product B</u>	<u>Product C</u>	<u>Product D</u>	<u>Total</u>
1-1000 mips					
Market Share	49.0%	24.5%	6.1%	20.4%	100.0%
Avg Unit Cost	\$35.55	\$34.87	\$30.68	\$19.99	
BIC Unit Cost	\$8.81	\$8.28	\$30.68	\$9.60	
1000-5000 mips					
Market Share	22.2%	25.4%	12.7%	39.7%	100.0%
Avg Unit Cost	\$15.32	\$21.50	\$11.96	\$30.48	
BIC Unit Cost	\$2.78	\$2.50	\$7.14	\$10.30	
>5000 mips					
Market Share	14.3%	30.2%	20.6%	34.9%	100.0%
Avg Unit Cost	\$3.82	\$11.13	\$7.85	\$18.18	
BIC Unit Cost	\$1.64	\$0.47	\$0.79	\$4.70	

BIC drive savings from product mix, product deployment and product pricing



BIC understand the causes of its software costs and sources for savings

	<u>Unit Cost</u>	<u>Total Cost</u>
Explanation of Variance from Best in Class		
Current Cost	\$ 2,459	\$ 12,811,390
Product Mix Variance	485	2,526,850
ISV Pricing Variance-Best in Class	165	859,650
Other ISV Pricing Variance-Best in Class	42	218,820
Product Count Variance	446	2,323,660
Redundant recommendations	(130)	(677,300)
Best-in-Class	\$ 1,451	\$ 7,559,710

Recommendations to Correct Variances

Current Cost	\$ 2,459	\$ 12,811,390
Product Migration-ISV	277	\$ 1,443,170
Product Migration-IBM	123	\$ 640,830
Product Migration-Other	49	\$ 255,290
Development Isolation	160	\$ 833,600
DB2 Isolation	168	\$ 875,280
CA Negotiation	165	\$ 859,650
Other ISV Negotiation	42	\$ 218,820
Internal Redundancy Elimination	19	\$ 98,990
Redundant recommendations	5	26,050
Best-in-Class	\$ 1,451	\$ 7,559,710

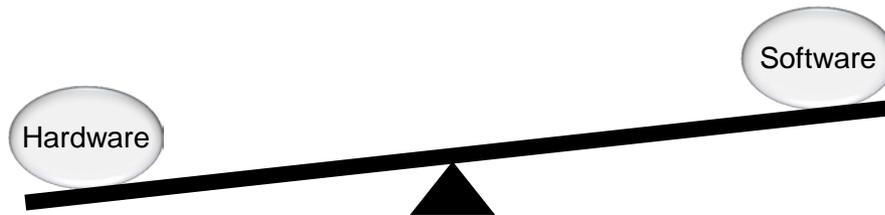
What does this fix?

Product Mix Variance
 Product Mix Variance
 Product Mix Variance
 Pricing Variance
 Pricing Variance
 Pricing Variance
 Pricing Variance
 Product Count Variance

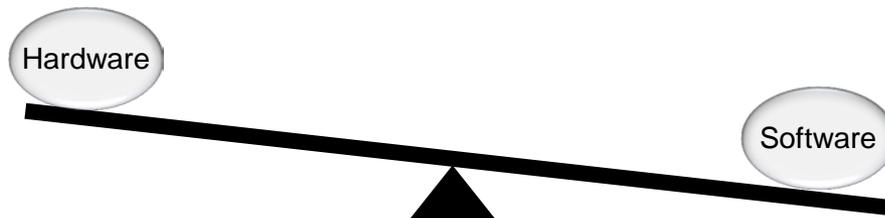
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Software Asset Management Best Practices involve.....

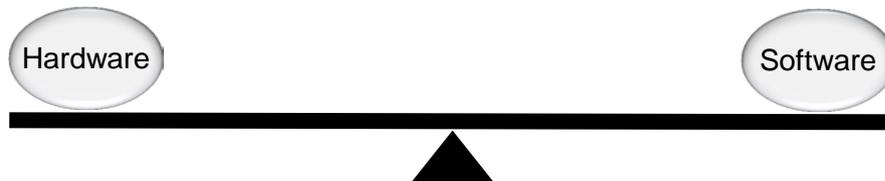
Balance business needs, hardware standards and software cost reduction.



Making hardware decisions without considering software costs **WILL** drive costs higher.



Making software decisions without considering hardware costs **WILL** drive costs higher.



Making balanced technology decisions while considering both hardware and software costs **WILL drive costs down.**

Software Asset Management practices at best in class data centers assume

1. Effective SAM starts with the deployment
 - a. Processes are set up to track deployment & usage
 - b. Database designed to ensure optimal deployment
2. Technical groups set up to regularly review and migrate to lowest TCO products
3. Inventory management is strategic
4. Hardware decisions are made after extensive software cost analysis
5. Costs are managed by optimizing data center thru product mix and product deployment
6. Unit cost
 - Don't be satisfied with industry average
 - Pursue \$910 per MIP Best in Class status

- Software budgets continue to increase
- Software unit costs are falling
- Software industry is consolidating
- IBM is growing its market share at the expense of ISVs
- Manage product inventory
 - Eliminate
 - Migrate
 - Negotiate
- Follow Best Practices trends to reduce overall costs

Best Practices Case Study - SAS

Average Data Center

- Licenses 5 SAS products
- Unused functionality
- Licensed at full capacity
- Pays \$149 per MIPS
- SAS represent 3.6% of total software budget

SAS Base
SAS GRAPH
SAS ACCESS for DB2
SAS STAT
SAS CONNECT
SAS FSP
SAS ACCESS for IMS
SAS ETS
SAS AF
SAS Share
SAS Assist
SAS C Compiler
SAS QC
SAS EIT

Best in Class Data Center

- License only SAS Base + 1-2 additional SAS products
- No excess functionality
- Licensed at less than full capacity
- Pays between \$3-\$15 per MIPS
- SAS represent 0.52% of total software budget

Recommended Next Steps – Tools and Techniques

- ✓ Benchmarking
 - Utilize industry BIC software benchmarks
- ✓ Price Assurance
 - Utilize available pricing tools to ensure you are paying industry best in class rates
- ✓ Usage Analysis
 - Ensure that unused products are eliminated and compliance issues are minimized
- ✓ Deployment Analysis
 - Link product purchases to architecture and ensure that standards are being followed
- ✓ Product Standardization
 - Establish core set of products and functionalities to minimize software & labor costs and maximize client revenue
- ✓ Data Center optimization
 - Maximize software savings by designing optimal hardware and software configuration

Optimization thru Measurement

For further information please contact:

Michael Swanson

President

+1 612 850-4726

Email: mswanson@isamgroup.com