

The Total Cost of Ownership for Unified Communications

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Agenda for this Webinar

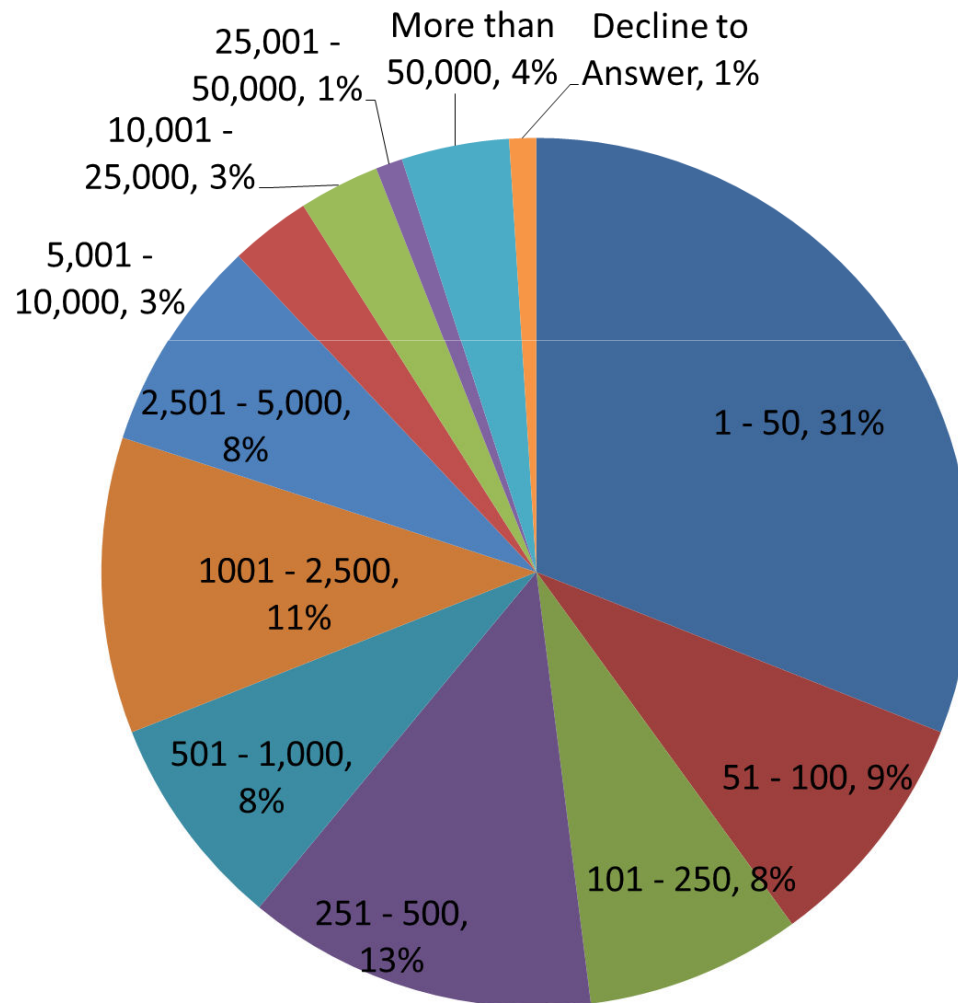
- ❑ Who was surveyed for this study?
- ❑ What can go wrong when Unified Communications is not installed correctly?
- ❑ How was TCO modeled for this study?
- ❑ What were the initial or startup costs associated with Unified Communications?
- ❑ What were the ongoing management and training costs?

Demographics and Methodology

Methodology

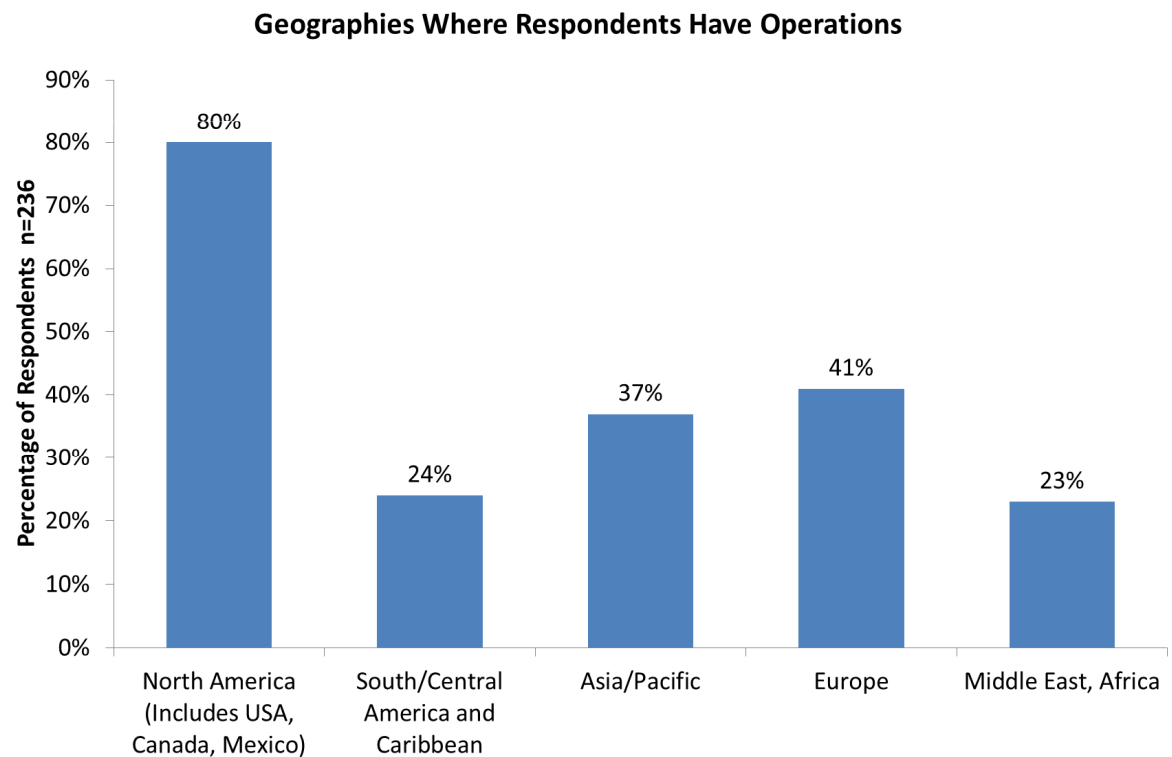
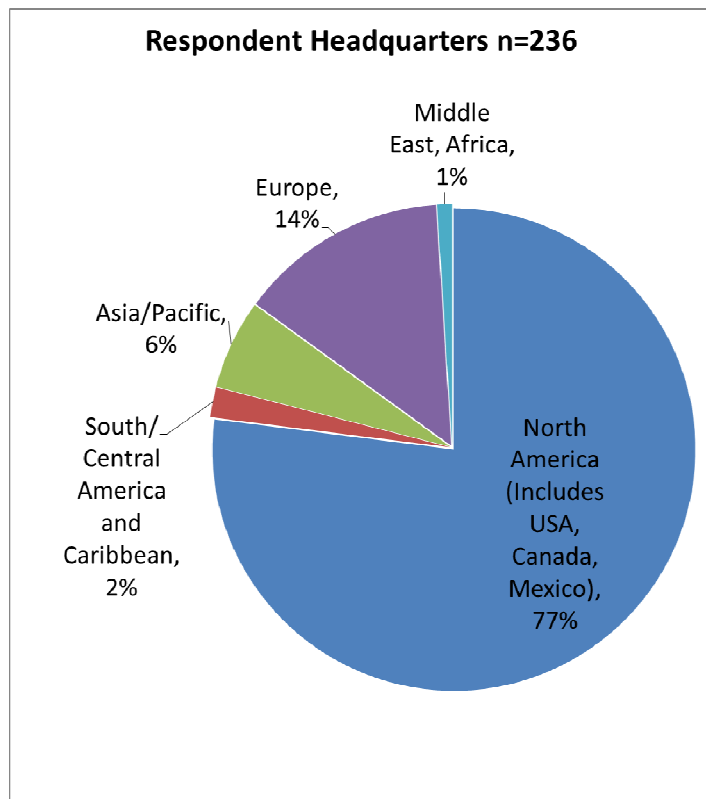
- ❑ Survey-driven study to quantify TCO components associated with Unified Communications
- ❑ 236 Respondents, including 41% doing business in Europe and 36% in Asia-Pac
- ❑ Follow up calls for all data that was suspect or out of range
- ❑ Breakdowns by solution when there were 10 or more respondents

Percentage of Respondents based on Headcount



Geographies Where Respondents Have Telephony

Although few respondents were from AsiaPac or Europe, 37% had operations in AsiaPac and 41% in Europe.



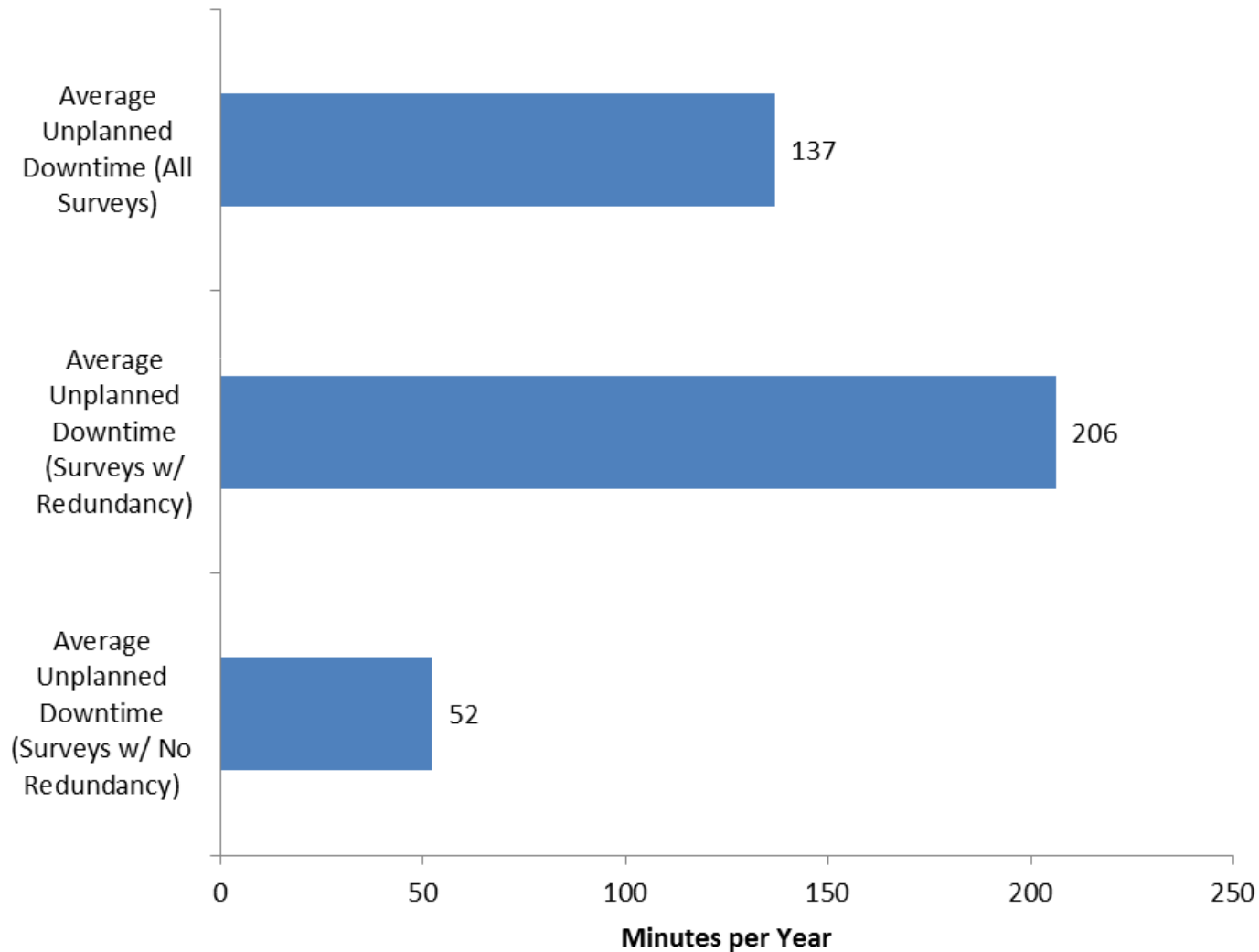
The Complexity of UC Deployments and the Cost of Downtime

UC Application Adoption

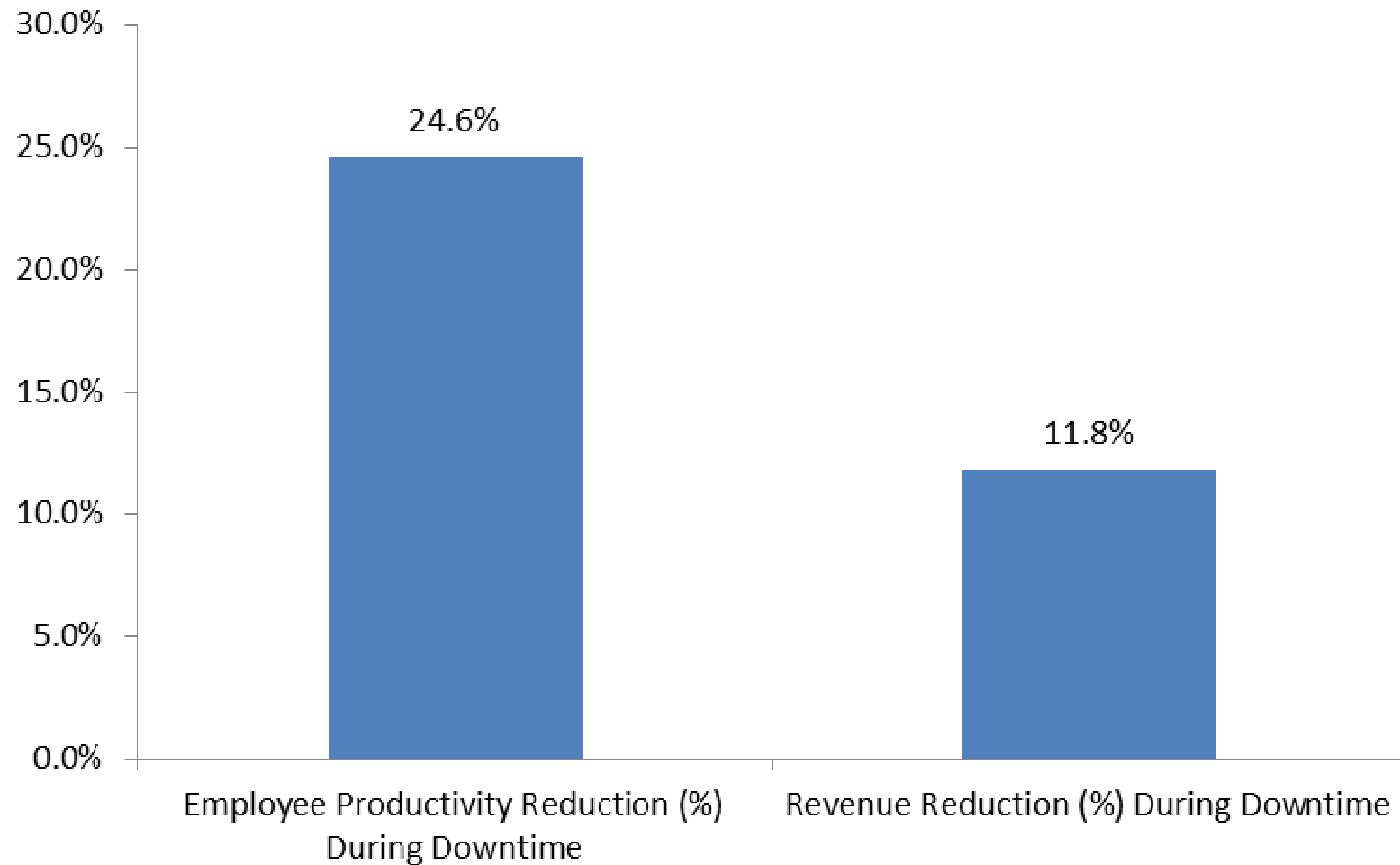
(N=220 for all applications)	Built-In	Add-on
Audio Conferencing	77%	16%
Video Conferencing	25%	57%
Instant Messaging	40%	42%
Presence	50%	28%
Unified Messaging	51%	33%
Softphone (Desktop Communications Interface)	61%	27%

There are more potential failures in Unified Communications compared to traditional telephony.

Why Did Respondents With Redundancy Have More Downtime than Those Without?



Impact of Downtime on Productivity and Revenue



LAN/WAN Costs

Over half of our respondents had upgraded either their LAN or their WAN in conjunction with their Unified Communications deployment.

	LAN Upgrade/ IPT Phone	WAN Upgrade/ IPT Phone
Less than 1,000 Phones	\$300.61 (n=89)	\$243.54 (n=58)
Over 1,000 Phones	\$152.53 (n=24)	\$22.99 (n=21)
All Respondents	\$165.93 (n=113)	\$32.97 (n=79)

Modeling for Unified Communications Total Cost of Ownership

Key Questions for Unified Communications

Which of these costs are locked in by your UC solution selection?

- ❑ Can You Create a Business Case?
- ❑ Can You Afford It?
- ❑ Can Your Infrastructure Support It?
- ❑ Do You Have The Right Endpoints?
- ❑ Can You Deploy and Support to Scale?
- ❑ Are Key Applications Supported Well?
- ❑ Are Communications Secure and Compliant?

TCO Model: Upfront Capital and Operational Costs

TCO Category	TCO Cost Components	Tracked in Aberdeen TCO Study
Upfront Capital	IPT Telephony Equipment	Yes
	LAN Upgrade Equipment	Yes
	WAN Upgrade Equipment	Yes
Upfront Operational Costs	End User Training	No
	Inventory/Service Audit	No
	System Implementation	Yes
	Administrator Training	Yes

TCO Model: System Operational Costs

TCO Category	TCO Cost Components	Tracked in Aberdeen TCO Study
UC System Operating Costs (Annual)	System Maintenance	Yes
	Software Assurance	Yes
	Moves, Adds, Changes and Disconnects (MAC-D)	Yes
	System Management	Yes
	Internal Help Desk Resources	No
	Recurring End User Training	No
	Recurring Administrator Training	Yes
	Call Accounting	No
	Telecom Expense Management	No
	UC Security	No
	Cost of System Downtime	Yes
	Electricity Consumption	No
	Desk Phone Replacement	No
	Smartphone/Mobile Device Replacement	No
	Hardware Replacement	No

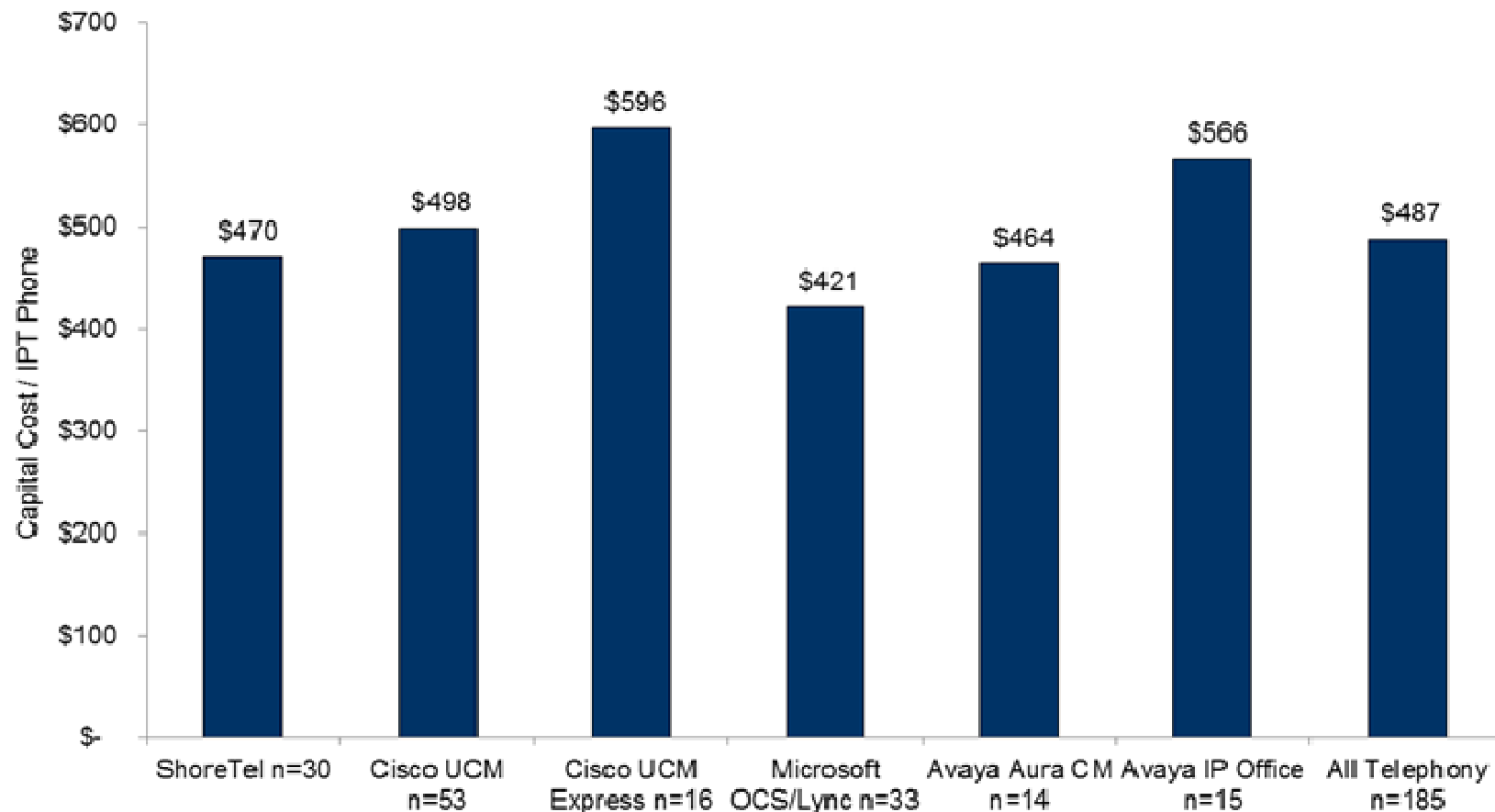
TCO Model: Ongoing Network Costs

TCO Category	TCO Cost Components	Tracked in Aberdeen TCO Study
Ongoing Network Costs (Annual)	WAN Circuit Cost	No
	WAN Optimization	No
	End-to-End Voice Monitoring	No
	LAN Service Cost	No
	Voice Trunk Cost	No
	Long Distance Charges	Yes

Initial Unified Communications Costs

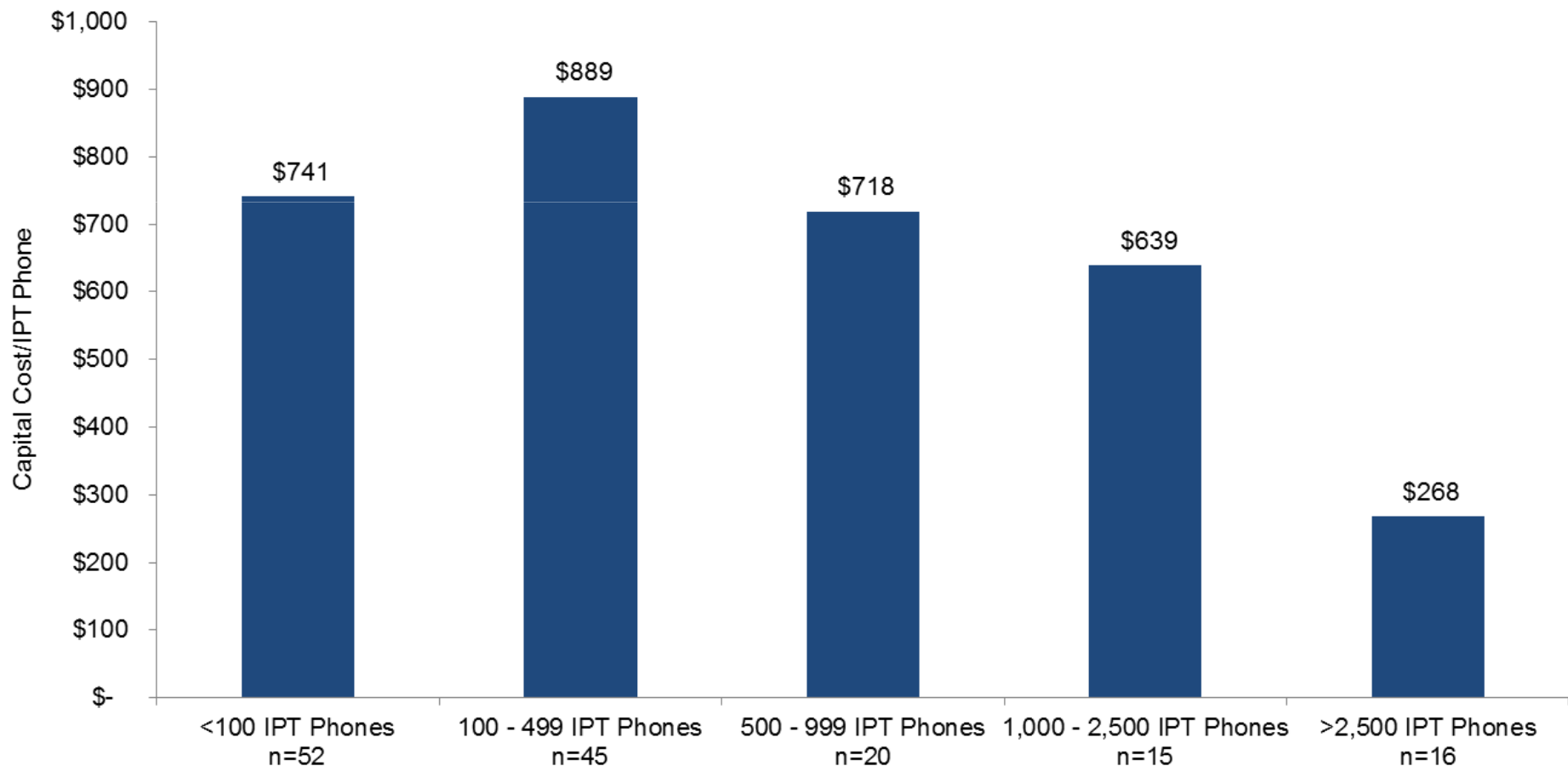
Capital Expenditure per IP Telephony Phone

Surprisingly similar despite differences in deployment size, site size, and phone list price. Why is this?

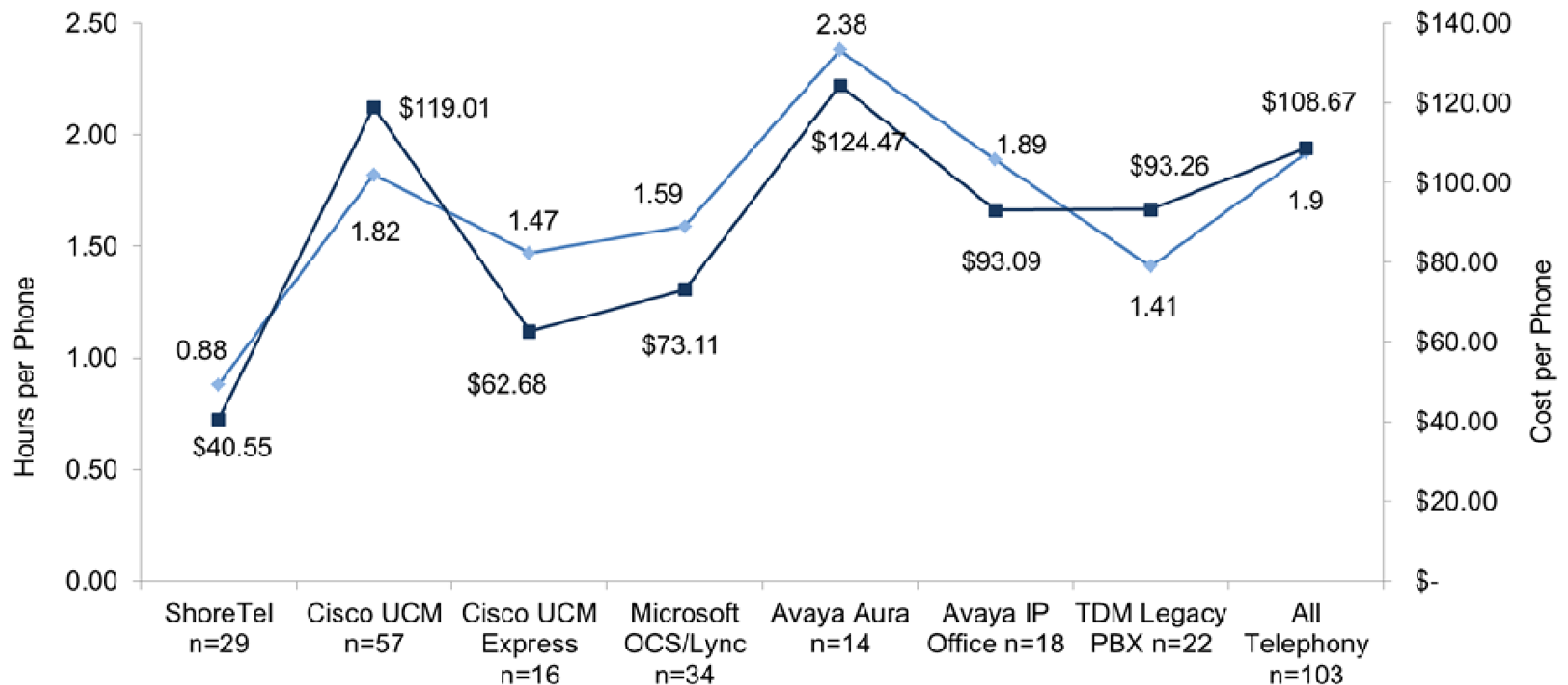


Capital Cost per Phone By Size

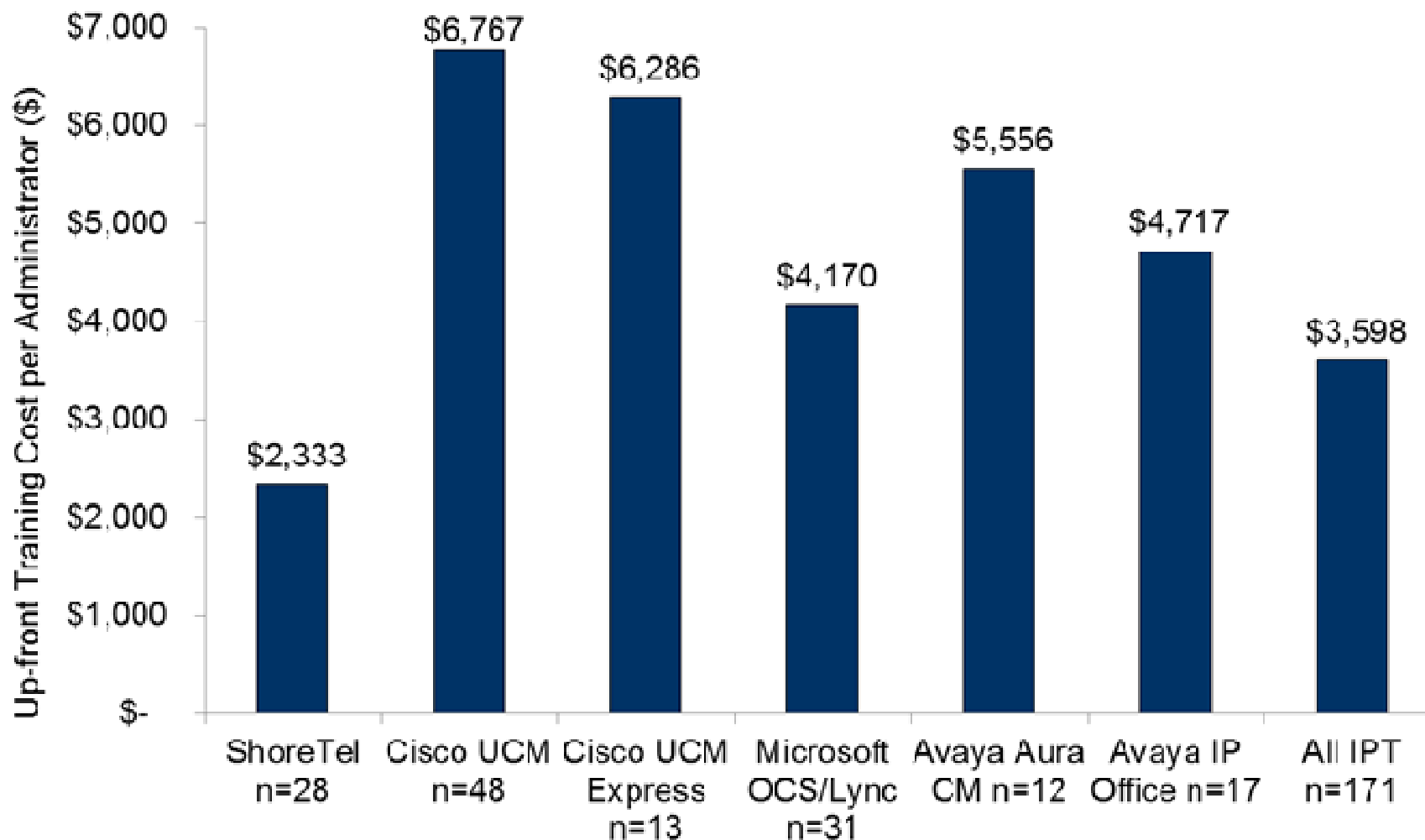
For large deployments, hardware costs are subsidized by services over the life of the solution.



Implementation Cost Per Hour and Hours Per Phone



Initial Training per Administrator – By Solution



Ongoing Unified Communications Management and Training Costs

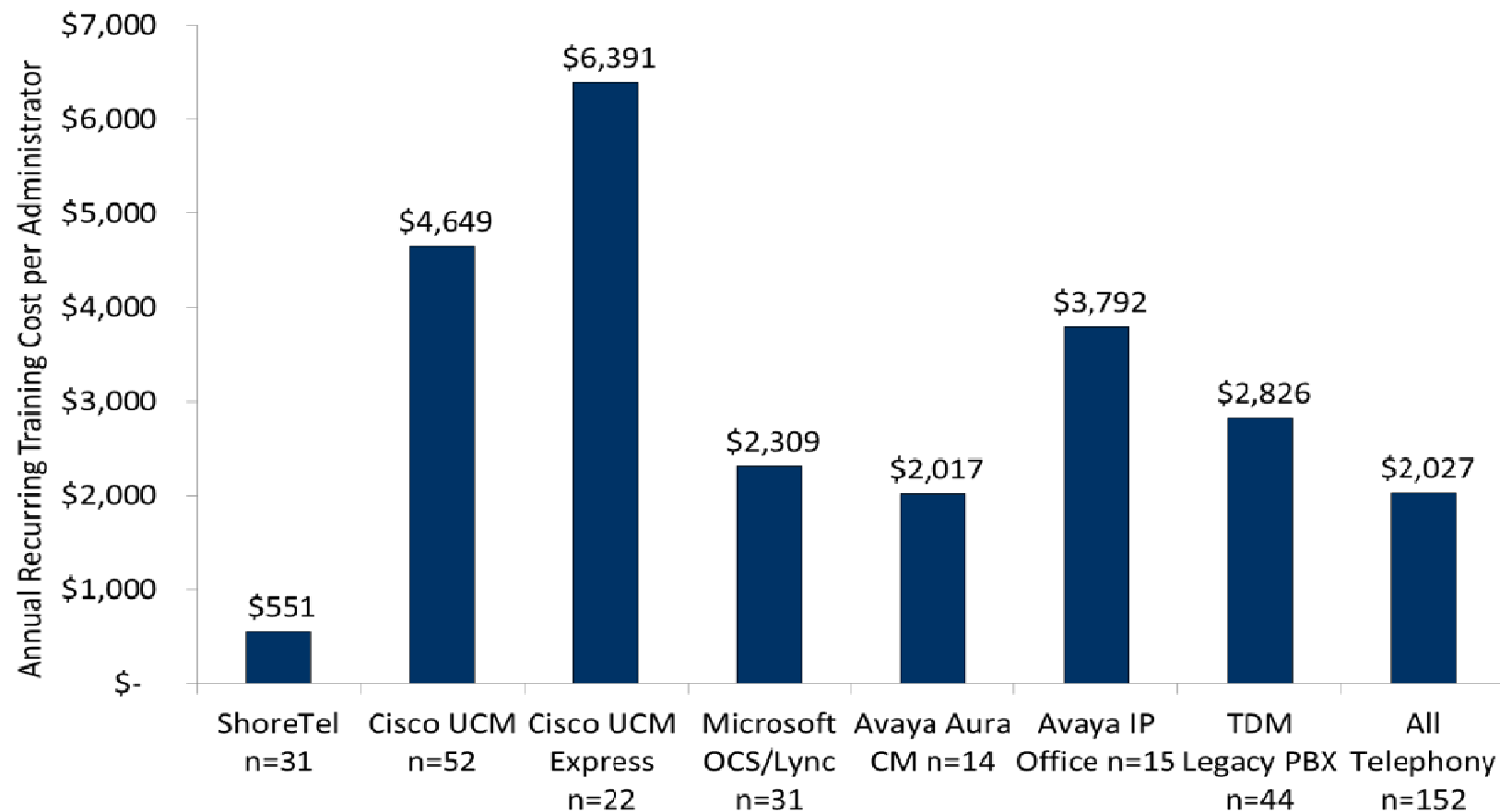
Enterprise Telephony Maintenance and Assurance Costs

	Annual Maintenance Costs per Phone	Annual Software Assurance per Phone	Combined Maintenance/ Assurance per Phone
ShoreTel (n=11)	\$40.20	\$29.75	\$69.95
Cisco UCM (n=57)	\$64.41	\$101.00	\$165.41
Microsoft OCS/Lync (n=35)	\$65.01	\$64.50	\$129.51
TDM Legacy PBX (n=27)	\$42.88	\$43.24	\$86.12
All IP Systems (n=101)	\$59.61	\$57.57	\$117.18

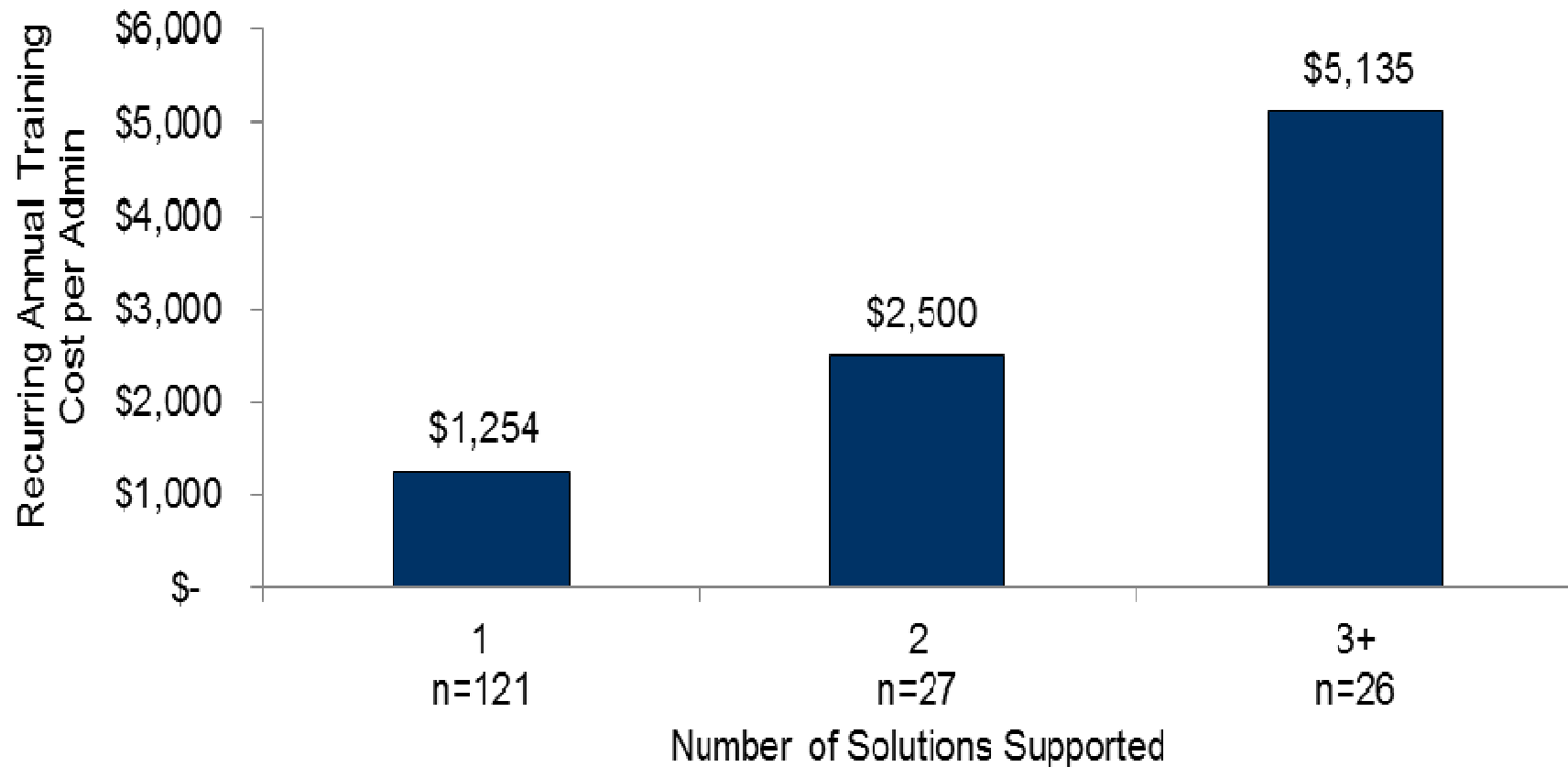
System Management Costs

	FTE's per 1000 phones	Average Salary per System Management FTE	Average System Management Salary Cost per 1,000 phones
ShoreTel (n=31)	1.81	\$58,000	\$105,000
Cisco UCM (n=52)	5.45	\$83,000	\$454,000
Cisco UCM Express (n=22)	2.25	\$72,000	\$163,000
Microsoft OCS/Lync (n=31)	2.85	\$75,000	\$214,000
Avaya Aura CM (n=14)	3.05	\$59,000	\$181,000
Avaya IP Office (n=15)	3.02	\$54,000	\$164,000
TDM Legacy PBX (n=44)	7.26	\$52,000	\$375,000

Ongoing Annual Training Cost per System Management FTE – By Solution



Ongoing Annual Training Cost for System Administration FTEs – By Number of Solutions



The Cost of MAC-Ds

	ShoreTel (n=24)	Cisco UCM (n=31)	Microsoft OCS/Lync (n=20)	All Telephony (n=118)
Minutes per MAC-D	6	17	18	15
Average Annual Salary: System Management	\$58,000	\$83,000	\$75,000	\$52,000

Conclusions

Key Insights

- ❑ **TCO analysis must extend beyond initial capital costs, maintenance and software assurance.**
- ❑ **Understand the full cost of labor required to manage Unified Communications.**
- ❑ **Calculate all potential operational costs over the full intended lifespan of the solution for a complete TCO analysis.**

Vendor Summary of Key Data

	ShoreTel	Cisco UCM	Cisco UCM Express	Microsoft OCS/ Lync	Avaya Aura CM	Avaya IP Office	TDM Legacy PBX	All Telephony
Customer equipment price / IPT phone (All Segments)	\$469.75	\$497.91	\$595.63	\$420.55	\$463.59	\$565.80	\$561.43	\$486.97
Internal implementation cost per desk phone	\$40.55	\$119.01	\$62.68	\$73.11	\$124.47	\$93.09	\$93.26	\$108.67
Up-front training cost per administrator	\$2,333	\$6,767	\$6,285	\$4,170	\$5,555	\$4,717	\$4,763	\$1,764
Annual maintenance cost per phone	\$40.20	\$64.41	N/A	\$65.01	\$66.46	\$52.17	\$42.88	\$59.61
Annual software assurance cost per phone	\$29.75	\$101.00	N/A	\$64.50	\$141.34	\$193.52	\$43.24	\$57.57
Average Minutes per MAC	6	17	N/A	18	N/A	12	16	15
FTEs per 1,000 IPT phones (All Segments)	1.8	5.5	2.3	2.9	3.1	3.0	7.3	4.1
Recurring Training Cost per Administrator	\$551	\$4,649	\$6,391	\$2,309	\$2,017	\$3,792	\$2,826	\$2,027

* Only for IP Telephony phones

Thank you for your
time!



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