Business Unlimited

Integrated Business Lower TCO

ISR – The Integrated Business Solution!
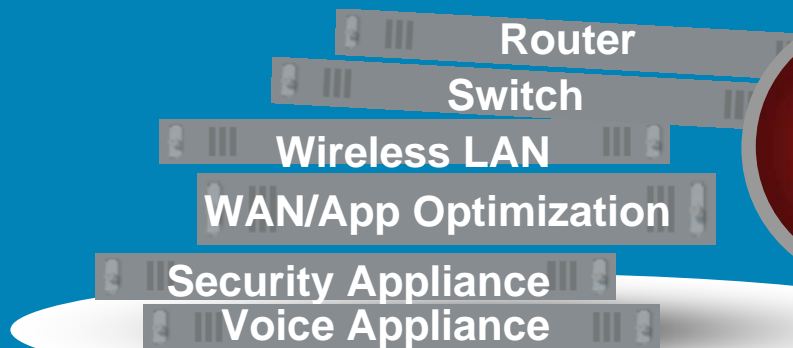
Overlay Appliances

Router

Switch

Wireless LAN

WAN/App Optimization

Security Appliance

Voice Appliance

VS.

Integrated Services Router

Cisco ISR 3845 with integrated Security, Voice, Wireless, Video, WAN Optimization and Switch

Traditional Business

Today's Business

Distributed Business Landscape

80% of enterprise workers work outside headquarter style building.

Nemertes Research

Operational expenses dominate total cost of ownership, with operation costs accounting for 79% of the equipment TCO.

Gartner Group

There are 1.5 million branch offices in the US alone—1/3 of all employees work in a branch.

US Department of Commerce

Branches consume 70- 90% of business resources.

NetworkWorld

WHY?
- **To be closer to diverse markets and customers**
- **Localized Decision Making**
- **Availability of Human Resources**
- **Availability of High Speed Access**
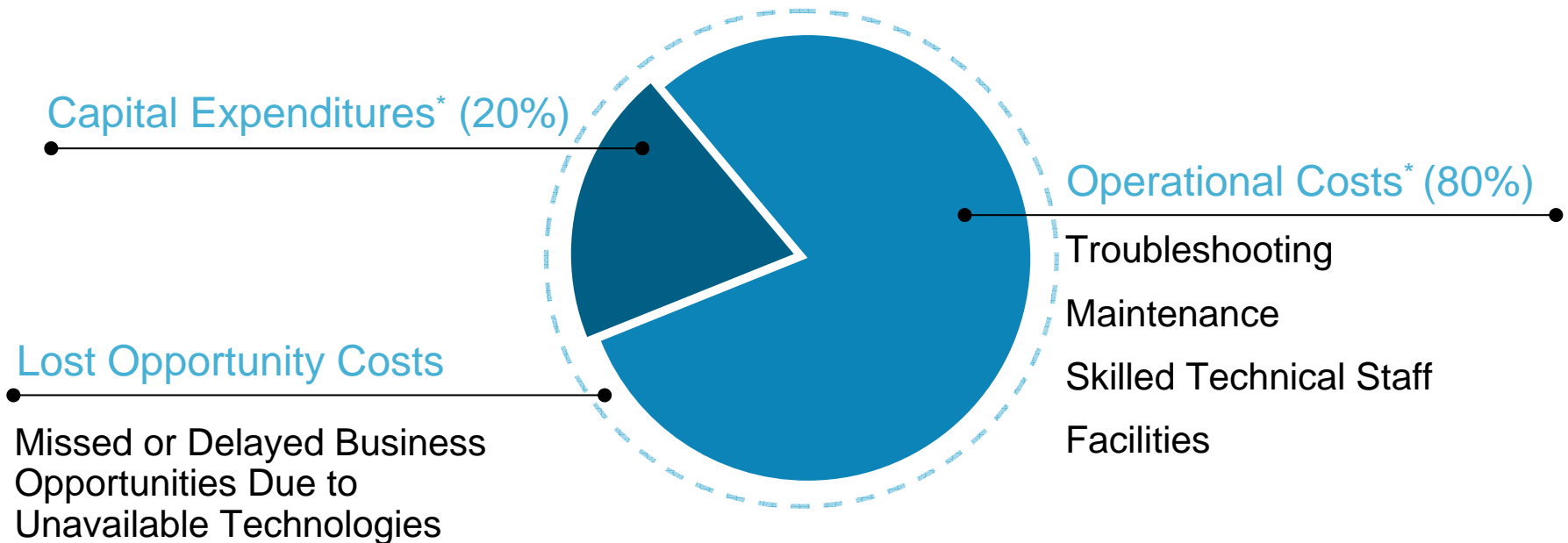- **Cost control**

Top Ten Causes for Higher TCO

1. **Hardware Diversity**

2. **Configuration Complexity and Support Complexity**

3. **Security and Regulatory demands**

4. **Conflicting Performance Criteria**

5. **Higher costs for Incremental Services**

6. **Higher recurring expenses**

7. **Minimal Opportunities for Automation**

8. **Multiple Maintenance Contracts**

9. **Minimal Synergies Between Applications**

10. **Lack of business agility and high upgrade costs**

Network Total Cost of Ownership (TCO)
Network Costs = 20% Purchase, 80% Operations

Capital Expenditures* (20%)

Operational Costs* (80%)

Troubleshooting

Maintenance

Skilled Technical Staff

Facilities

Lost Opportunity Costs

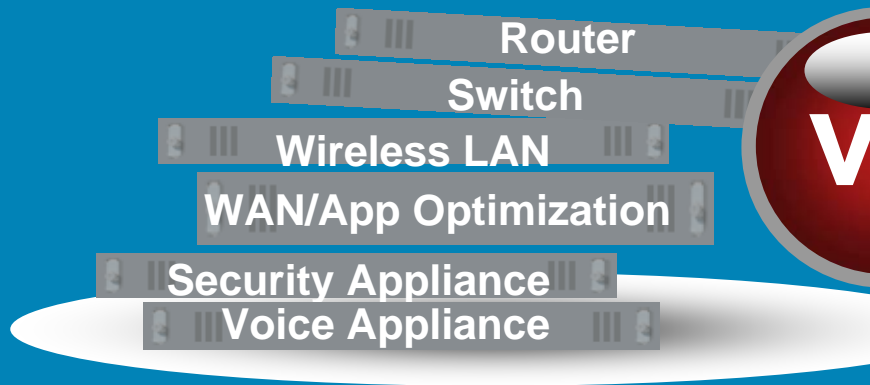Missed or Delayed Business Opportunities Due to Unavailable Technologies

- Capital expenditure is one element of the total cost of a system
- Operational and opportunity costs outweigh capital expenditures

Source: Gartner Group, 2005.
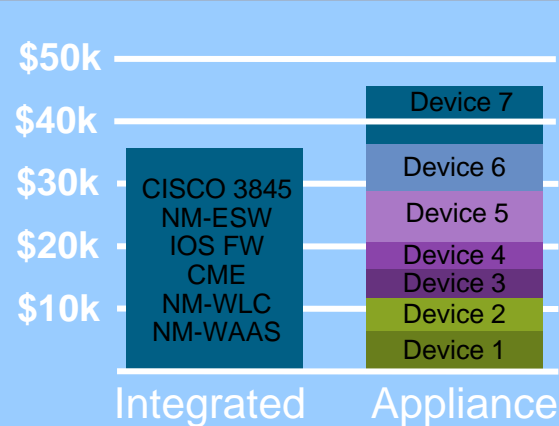
Lower CAPEX with ISR

Overlay Appliances

Router
Switch
Wireless LAN
WAN/App Optimization
Security Appliance
Voice Appliance

VS.

Integrated Services Router

Cisco ISR 3845 with integrated Security, Voice, Wireless, Video, WAN Optimization and Switch
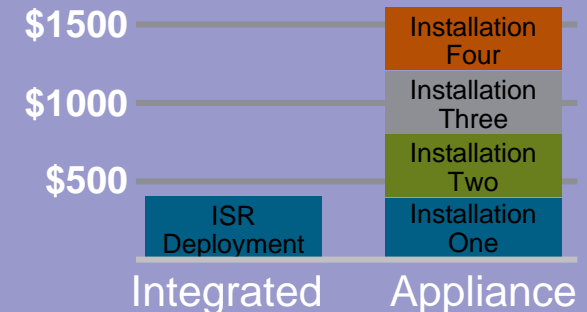
5 to 30 % CAPEX SAVINGS

$50k
$40k
$30k
$20k
$10k

CISCO 3845
NM-ESW
IOS FW
CME
NM-WLC
NM-WAAS

Device 7
Device 6
Device 5
Device 4
Device 3
Device 2
Device 1

Integrated   Appliance

Buying individual products drives up initial outlays by 5-30%

Multiple deployment costs for each additional technology

_____

Lengthy recertification for new products

$1500
$1000
$500

Installation Four
Installation Three
Installation Two
Installation One

ISR Deployment

Integrated   Appliance

ISR TCO Model – Implementation expenses and Operational expenses Model

ISR vs. 6 Overlay Appliances

Comparison of Implementation and Operational Expenses

Direct Costs:
- Management Tools
- Annual Maintenance Costs
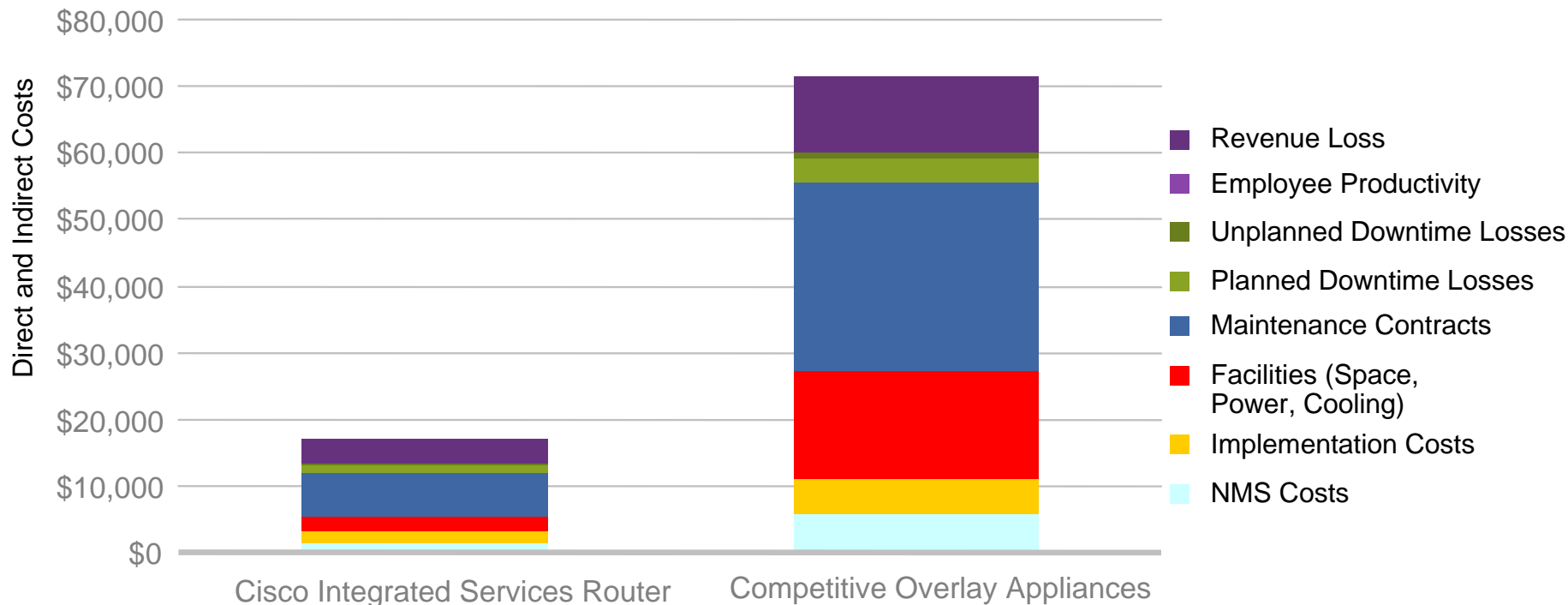- Facility
- Deployment

Indirect Costs:

Network Availability (planned downtime, trouble-shooting, revenue loss and employee productivity loss)

TCO Analysis: Direct and Indirect Costs

Total Cost of Ownership

Legend:
- Revenue Loss
- Employee Productivity
- Unplanned Downtime Losses
- Planned Downtime Losses
- Maintenance Contracts
- Facilities (Space, Power, Cooling)
- Implementation Costs
- NMS Costs

Y-axis: Direct and Indirect Costs ($0 – $80,000)

X-axis: Cisco Integrated Services Router, Competitive Overlay Appliances

Over 70% OpEx Reduction

Source: Cisco

Cost Benefits

Costs	Benefits
Annual Maintenance Contracts	4X savings over 3 years
Greener Choice (facilities, power, cooling)	Owning an ISR costs 1/5 compared to overlay appliances
Simple Elegance – the Power of Integration	1/3 Network Mgmt Systems and Deployment Costs
Availability – cost of outage and downtime	It costs 2.5 times more to own overlay network appliances
Employee and revenue related losses	ISR offers 4X greater availability and cost savings.
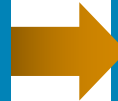
ISR : Lower TCO, Compelling ROI

Lower Total Cost

	ISR	Appliance	
Direct Costs	$12,600	$57,800	**> 4X**
Indirect Costs	$3,100	$14,200	**> 3X**

*Does not include equipment pricing

Higher ROI: Owning an ISR provides more than 300% improvement in ROI over three years.

What If – no ISR!

Cost of Doing Nothing

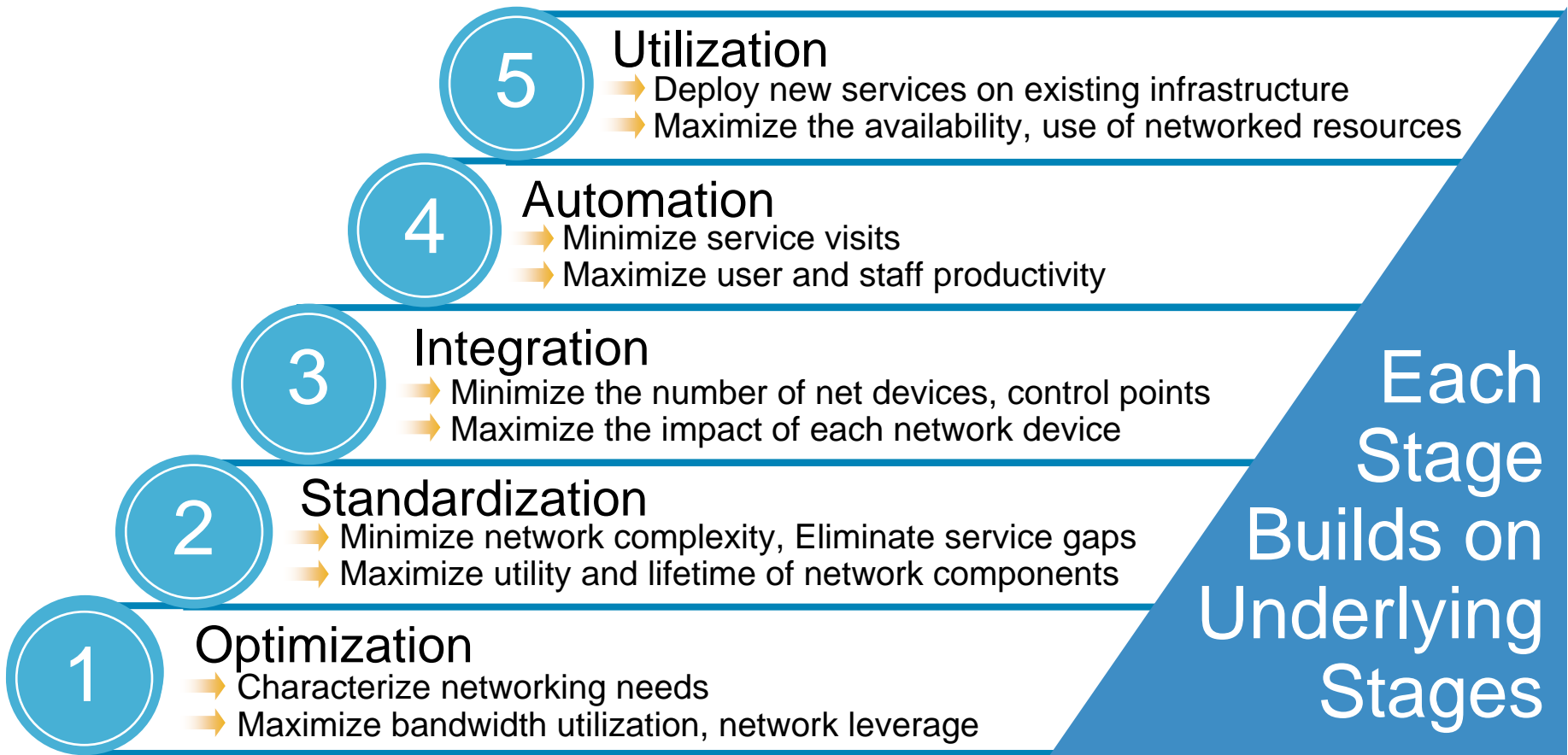**Over $560K MORE in operational expenses for a 10 branch network over 3 yr period**

Opportunity Costs (not monetized)
- **MORE network complexity**
- **MORE training requirements for multiple NMS**
- **MORE Management of diverse Annual Maintenance Contract**
- **MORE troubleshooting**
- **MORE finger pointing**
- **NO branch evolution and headroom for growth**

The Roadmap to Lower TCO

Objective ◆ Lower TCO Through:

5 Utilization
- ➡ Deploy new services on existing infrastructure
- ➡ Maximize the availability, use of networked resources

4 Automation
- ➡ Minimize service visits
- ➡ Maximize user and staff productivity

3 Integration
- ➡ Minimize the number of net devices, control points
- ➡ Maximize the impact of each network device

2 Standardization
- ➡ Minimize network complexity, Eliminate service gaps
- ➡ Maximize utility and lifetime of network components

1 Optimization
- ➡ Characterize networking needs
- ➡ Maximize bandwidth utilization, network leverage

Each Stage Builds on Underlying Stages

ISR – The Integrated Business Solution!

Overlay Appliances

Router
Switch
Wireless LAN
WAN/App Optimization
Security Appliance
Voice Appliance

VS.

Integrated Services Router

Cisco ISR 3845 with integrated Security, Voice, Wireless, Video, WAN Optimization and Switch

Traditional Business

Today's Business

TCO Analysis: Redundant Configuration

Total Cost of Ownership

Chart legend:
- Revenue Loss
- Employee Productivity
- Unplanned Downtime Losses
- Planned Downtime Losses
- Maintenance Contracts
- Facilities (Space, Power, Cooling)
- Implementation Costs
- NMS Costs

Y-axis: Direct and Indirect Costs ($0 – $80,000)

X-axis categories: Cisco Integrated Services Router, Competitive Overlay Appliances
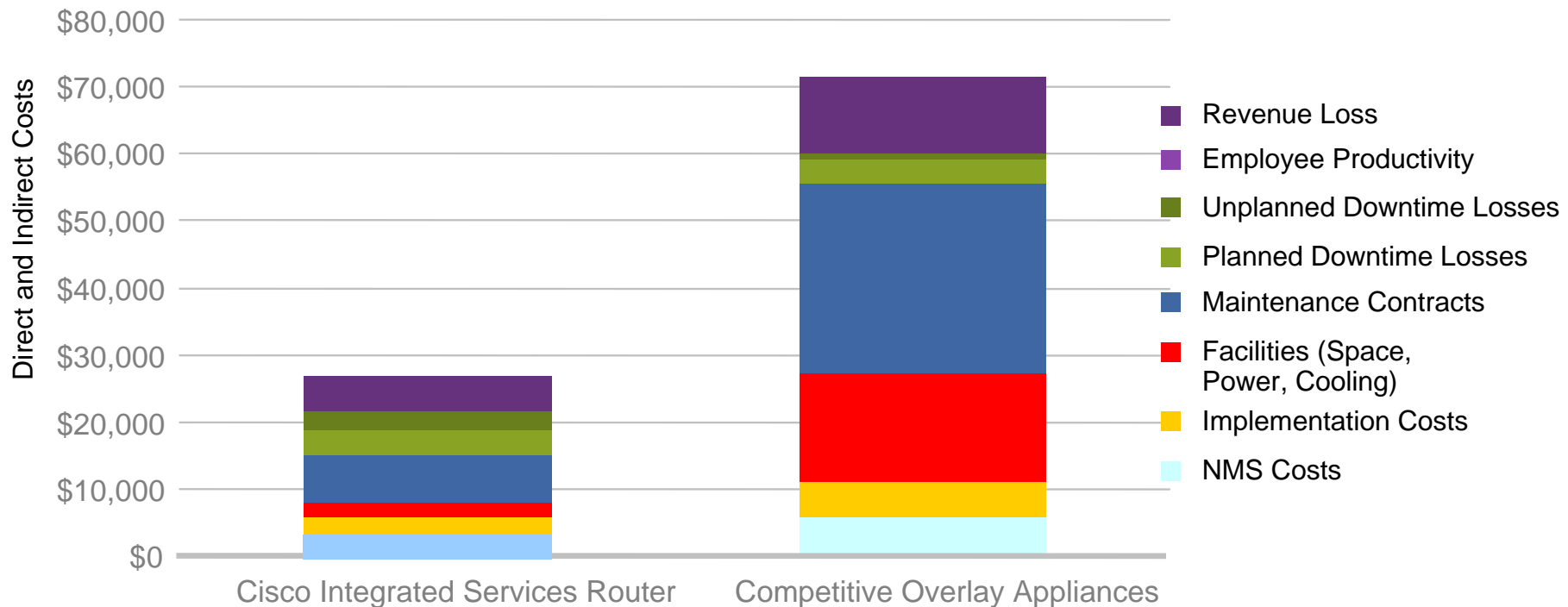
Still provides almost 60% OpEx Reduction