

The Right Foundation for SMB Networks:

Smart Switches vs. Fully Managed Switches

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Switching Products

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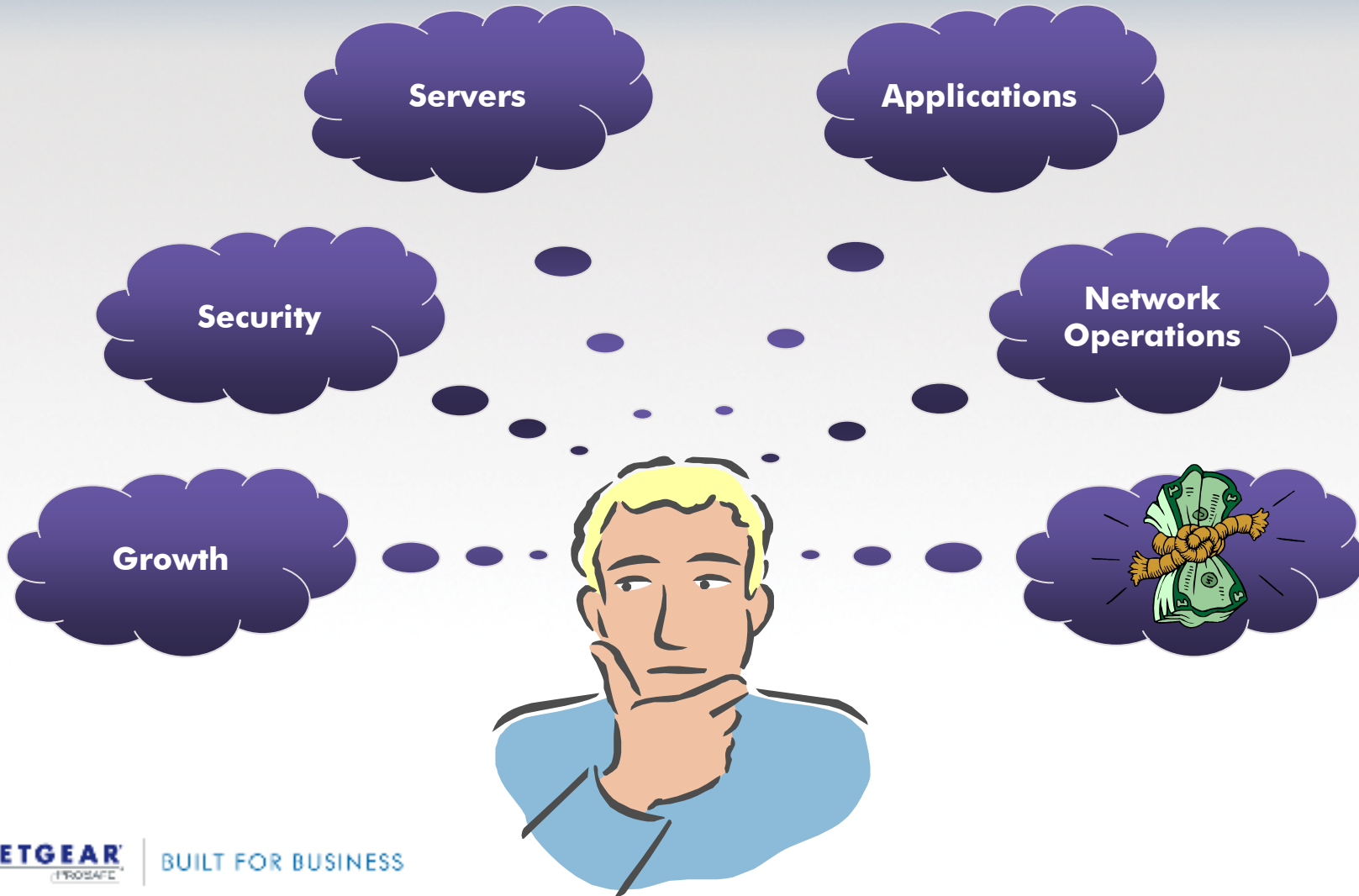
Agenda

- **Defining the SMB customer**
- **Key challenges faced by customers**
- **Traditional solutions**
- **Introduction to 'Smart' switches**
- **Comparing switching solutions**
- **Ideal solution**
 - **Segmentation based recommendations**

The SMB Market: Unparalleled Growth

- **Exciting and urgent opportunity:**
 - **34% of WW IT spend (IDC Estimates)**
 - > **76% of spend <500 employees**
 - **Projected growth of 40% (2007-2011) (IDC Estimates)**
- **Rapidly changing attitudes:**
 - **Embracing internet as a productivity tool**
 - **Technology a competitive edge**
- **Segmentation based on size and scope:**
 - **1 – 5 user SoHo Business**
 - **5 – 20 users Micro Business**
 - **20 – 100 users Small Business**
 - **100 – 200 users Growing Business**
 - **200 + user Medium Business**

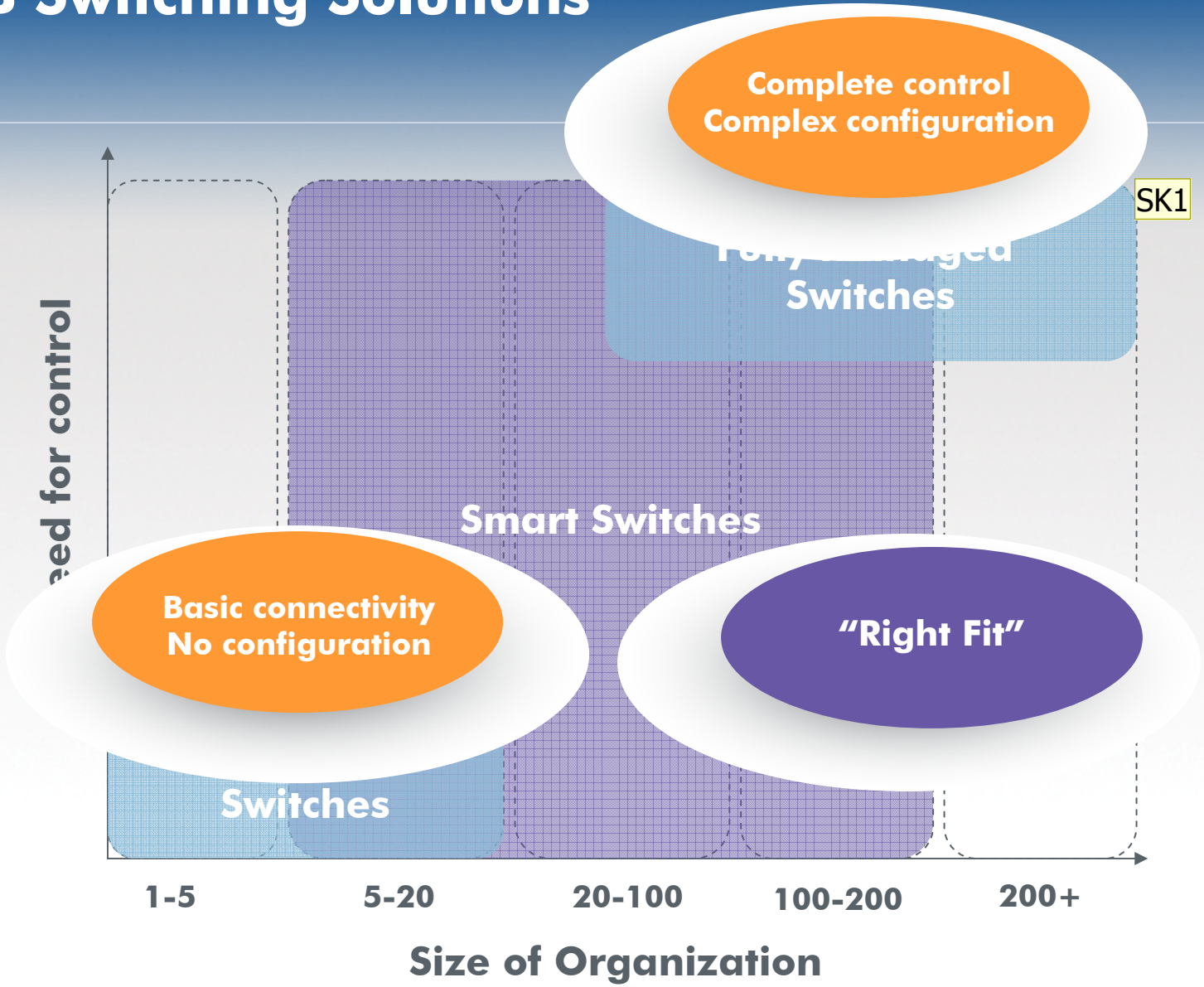
What's On The SMB IT Manager's Mind?



Key Challenges

- **Rapid growth – “How do I keep up?”**
- **Not just scale – increased sophistication**
 - ERP, 2.0, VoIP, Wireless...
- **Increasing need for control over network**
 - **Security: Confidentiality, compliance requirements**
 - **Throughput and prioritization**
 - **Ongoing monitoring/trouble-shooting**
- **Lean organizations**
 - **Tight budgets and minimal IT resources**
- **Pain Point**
 - **Unmanaged switches are no longer sufficient and Managed switches are complex and expensive**
 - **Need for reliable, intelligent solutions that are easy to manage and affordable**

SMB Switching Solutions



Slide 6

SK1

changed this slide

Sanjay Kumar, 4/21/2008

Smart Switches

- **Wide range of features and configurations:**
 - **Security, traffic management, availability: basic and advanced levels**
 - **Stacking, POE, Static Routing**
- **Configurable through web-based GUI**
 - **Intuitive**
 - **WYSIWYG**
- **Benefits:**
 - **Saves time and resources – easy configuration and ongoing management**
 - **No certifications required**
 - **Lower IT salary costs**
 - **Lower TCO: Capex + Opex**

Smart Switches vs. Fully Managed Switches

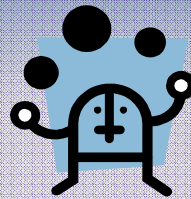
Requirements	Smart Switches	Fully Managed Switches
Cost	Low TCO: Capex + Opex	Higher TCO: Capex + Opex
Manageability	<ul style="list-style-type: none"> • Easy-to-configure • Web-managed only • Individual device configuration and firmware updates 	<ul style="list-style-type: none"> • Advanced configuration • CLI + Web-managed • Mass configuration, firmware updates
Scalability	<ul style="list-style-type: none"> • Ideal for up to 200 users • Support for fewer VLANs, MAC, ACL • Gigabit Uplinks • High speed stacking (up to 20 Gbps) 	<ul style="list-style-type: none"> • Ideal for 200+ users • Support for more VLANs, MAC, ACL • 10 Gig Uplinks • Higher speed stacking (up to 32 Gbps)
Features	<ul style="list-style-type: none"> • Basic and Advanced Features for Security and QoS • Less granular • Static Routing 	<ul style="list-style-type: none"> • Basic and Advanced features for Security and QoS • More granular • Dynamic Routing
Availability	<ul style="list-style-type: none"> • Fast convergence • Redundant stacking 	<ul style="list-style-type: none"> • Fast convergence • Redundant stacking

Different Strokes – Segment Needs

20-100

100-200

Minimal resources
Quick configuration
and easy maintenance



Minimal Resources
Quick configuration
and easy maintenance

Static Segmentation



Dynamic Segmentation

Smart Switches



Advanced
Smart Switches

Traffic
prioritization



Complex traffic
prioritization
Auto configuration

Network convergence

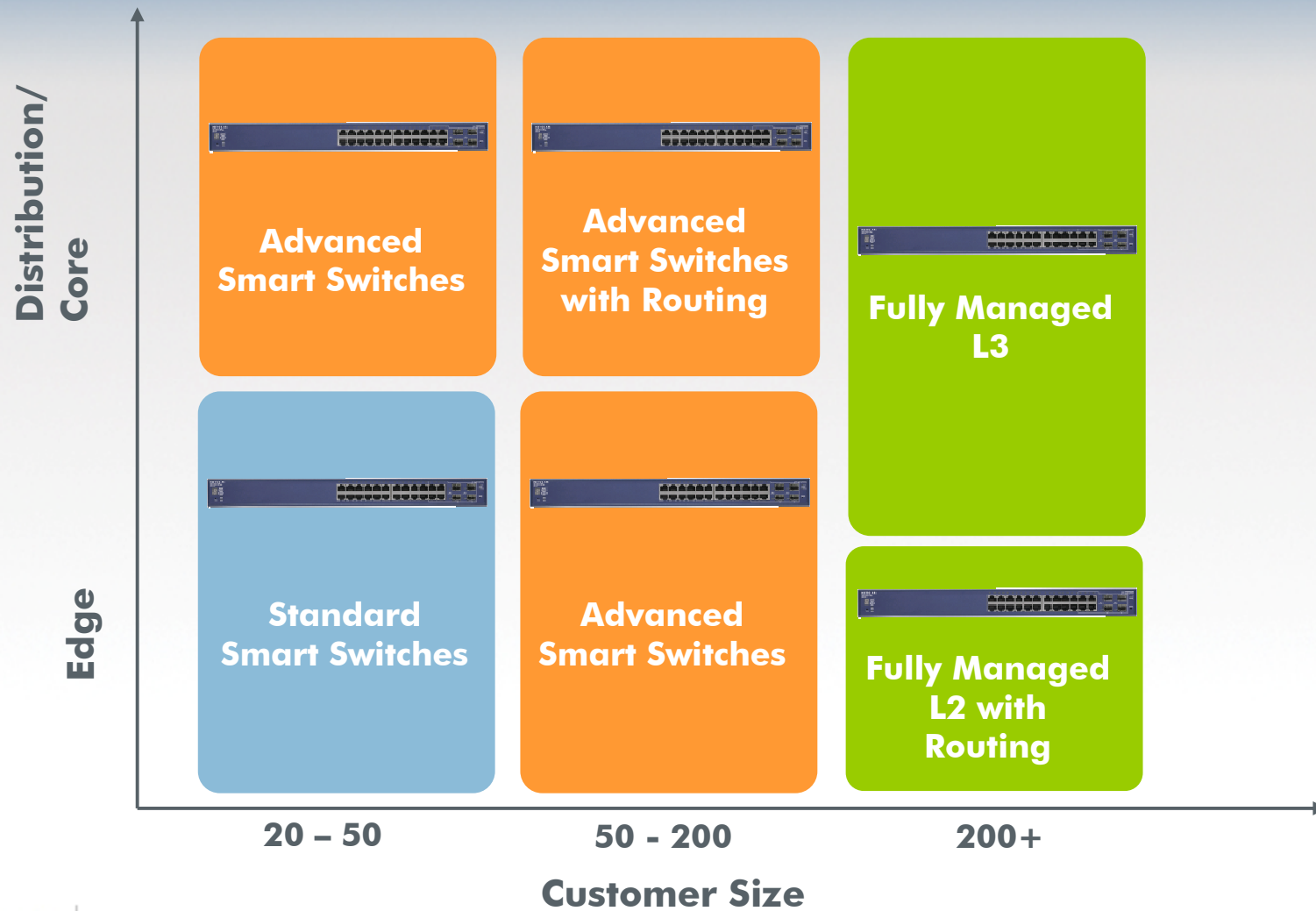


Rapid network convergence
Redundancy

Limitations of Smart Switches

- **Scale:**
 - **Ideal for up to 200 users. Beyond 200, need for scale with # of VLANs, MAC addresses supported**
 - **High-speed uplinks: 10 Gig not supported**
 - **Dynamic Layer 3 not supported**
- **Management:**
 - **Web-managed only - No CLI or Console port**
 - **Individual device management only**
 - > **No mass configuration**
 - > **No mass firmware updates**
 - > **No mass fault-management**

Deployment Scenarios



NETGEAR ProSafe Smart Switch Portfolio

Features	Smart Switch		Advanced Smart Switch						
	FS726T	GS716T	FS728TP	FS728TS	GS108T	GS724AT	GS724TS	GS724TP	GS724TR
	FS750T2	GS724T		FS752TS			GS748TS	GS748TP	GS748TR
	FS726TP	GS748T		FS752TPS					
Security									
Port/MAC based	x	x	x	x	x	x	x	x	x
Trusted MAC	x	x	x	x	x	x	x	x	x
IP ACL			x			x		x	x
802.1x			x	x	x	x	x	x	x
Guest VLAN			x	x	x	x	x	x	x
Quality of Service									
802.1p	x	x	x	x	x	x	x	x	x
DSCP		x	x	x	x	x	x	x	x
Voice VLAN						x		x	x
Availability									
IGMP Snooping	v1	v1	v1, v2	v1, v2	v1, v2	v1, v2	v1, v2	v1, v2	v1, v2
Spanning Tree	x	x	x	x	x	x	x	x	x
Rapid Spanning Tree					x	x		x	x
Multiple Spanning Tree									x
SNMP	v1, v2c	v1, v2c	v1, v2c, v3	v1, v2c, v3	v1, v2c	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3
POE			x	x				x	
Stacking				x			x		



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