

Market Restraints

Content Filtering Products Market: Market Restraints Ranked in Order of Impact (World), 2009-2015

Rank	Restraint	1 - 2 Years	3 - 4 Years	5 - 7 Years
1	Economic Down Turn & Budget Restraint			High
2	Content filtering technology's inability to keep up with hacker technology	High	High	High
3	High false positive rate	High	Medium	Low
4	The technology can cause bottlenecks in the network	High	Medium	Low

Source: Frost & Sullivan

Market Restraints (Contd...)

Content Filtering Products Market: Market Restraints Ranked in Order of Impact (World), 2009-2015

Rank	Restraint	1 - 2 Years	3 - 4 Years	5 - 7 Years
5	Managers believe that employees are responsibility enough to manage their own time	Medium	Medium	Medium
6	Subscription renewal and equipment upgrades	Medium	Medium	Medium
7	Companies have more immediate security and infrastructure requirements	Medium	Medium	Low
8	Network administration headaches	Low	Low	Low
9	Privacy Concerns	Low	Low	Low

Source: Frost & Sullivan

Market Restraints (Contd...)

- As the world economy continues to undergo an economic meltdown, network administrators and managers are finding it difficult to justify IT budgets that are requesting network security upgrades and new deployments. On the other hand with the rising enforcement of industry and federal regulations such as PCI-DSS and SOX, corporation of all sizes will be forced to find funding for security technology in order to avoid hefty fines and damage to their brand name that result from data breaches and public law suits.
- Hacking technology continues to evolve and enhance therefore causing havoc for content filtering solution vendors. Content filtering solutions are reactive solutions to yesterdays hacking technology. For example, current filtering technologies employ reputation engines that scan web pages for malicious content, gray or black list pages and IP(s) found with such content. However, recent hacking technology can detect scans and quickly remove malicious content before it is detected thereby avoiding being gray or black listed. Technology like behavior analysis is being implemented to tackle new threats.
- High false positive rate continues to be problematic for employees, researchers and educators who are attempting to effectively leverage the Internet for business-to-business transactions, secondary research and to educate students. For example, medical researchers or students can become frustrated by false positives that prevent them from accessing needed content due to the blocking of explicit words that may normally be used as medical terms.
- Filtering products that are placed in line to filter inbound and outbound network traffic sometimes pose latency issues or bottlenecks in the network. Chief executives or chief information officers (CIO) are less likely to invest capitol into content filtering solutions as a result of loss of revenue from the bottlenecks in the network.

Market Restraints (Contd...)

- Many companies believe that employees are responsible to manage their own time and they do not want to appear to be overbearing towards their staff hence the belief to implement this technology would suggest otherwise. The corporate debate of the expenses and dangers of monitoring or not to monitor Internet usage is likely to remain as a market restraint throughout the forecast period.
- Vendor lock-in subscription renewal costs continues to be a restraint due to additional financial investment that are required for the hardware and software upgrades.
- Currently companies have more immediate security and infrastructure requirements such as anti-malware and firewalls. The solutions also brings in an immediate return on investment as companies lower its potential risk for any type of data breach. The market will currently see this as a restraint as Chief Information Officers (CIOs) place content filtering on the least importance solution to implement.
- CIO and network managers are still dealing with reduced IT budgets, which usually equate to a reduction in IT staff and training hence, CIOs and network managers are more likely to campaign against any additional equipment, which will require integration to an existing network infrastructure, additional monitoring and maintenance.
- Privacy concerns from employees continues to be a concern, therefore businesses are reluctant to implement, but with strict compliance regulations this restraint will remain low through 2015.

Major Market Findings

- The world market for content filtering solutions reached \$ x.x billion in 2008.
- The market is expected to grow at a compound annual growth rate (CAGR) of xx.x% from 2008 to 2015 reaching x.x Billion in 2015.
- As from last year's report, software continues to make up the bulk of the revenues while at the same Software as a Service (SaaS) is growing rapidly due to the need for cost effective and agile security services.
- Appliances continue to be the mainstay of security services for the network. However, software and SaaS solutions are becoming more attractive in the market. Software solutions are becoming more attractive since companies do not have to purchase high cost network appliances.
- North America (NA) remains the largest market in 2008 with x.x billion dollars in revenues and with over xxx-thousand units sold. The revenue and units sold make of xx% of the market. North America is expected to have a CAGR of xx.x% and xx.x% for revenues and unit sales respectively. As the region experiences an economic decline, the demand for network security products is expected to remain high in the region due to industry and regulatory requirements. However the region's market share is expected to decline as EMEA and APAC adapt their network infrastructures to be in line with twenty-first century technology and to be more competitive with their North America counterparts.

Major Market Findings (Contd...)

- European-Middle-East-Africa (EMEA) and Asia Pacific (APAC) regions continue to grow at a steady tempo. The EMEA region is expected to make up xx.x% of the market for 2008 and the APAC region is expected to make up xx.x% of the market. EMEA's revenue and unit sales CAGRs are expected to be xx.x% and xx.x% respectively. APAC's revenue and unit sales CAGRs are expected to be xx.x percent and xx.x % respectively. As mentioned earlier the region will still experience high growth in the network security market as they continue to retrofit their networks to be more in line with twenty-first century standards and to become even more competitive with their NA counterparts.
- The Latin American (LA) region only accounted for x% of the overall 2008 content filtering market and is expected to remain at x% through out the forecasts period. Even though Frost & Sullivan maintains its belief that the region is ripe for rapid market growth as seen in APAC the region, the region's growth has become restrained due to the global economic melt down and therefore there is a lack of capitol to invest in the region.
- In terms of market verticals the banking & financial, government, healthcare and technology verticals makeup the major sectors for content filtering sales. The aforementioned verticals are required to have some form of content filtering technology in place to be compliant with corporate, industrial and government regulations such as an acceptable use policy, PCI-DSS and HIPPA. However all other major market verticals such as manufacturing & retail and education also need content filtering solution to be in compliance with similar regulations and legislation. This is also important for the education vertical due to CIPA legislation.

Revenue Forecasts

Content Filtering Products Market: Revenue and Growth Rate Forecasts (World), 2005-2015

Year	Revenues (\$ Millions)	Revenue Growth Rate (%)
2005	x,xxx.x	-
2006	x,xxx.x	34.3
2007	x,xxx.x	27.3
2008	x,xxx.x	24.9
2009	x,xxx.x	20.3
2010	x,xxx.x	17.2
2011	x,xxx.x	14.3
2012	x,xxx.x	11.9
2013	x,xxx.x	10.0
2014	x,xxx.x	7.8
2015	x,xxx.x	6.1

Compound Annual Growth Rate (2008-2015): xx.x%

Note: All figures are rounded; the base year is 2008. Source: Frost & Sullivan

Revenue Forecasts (Contd...)

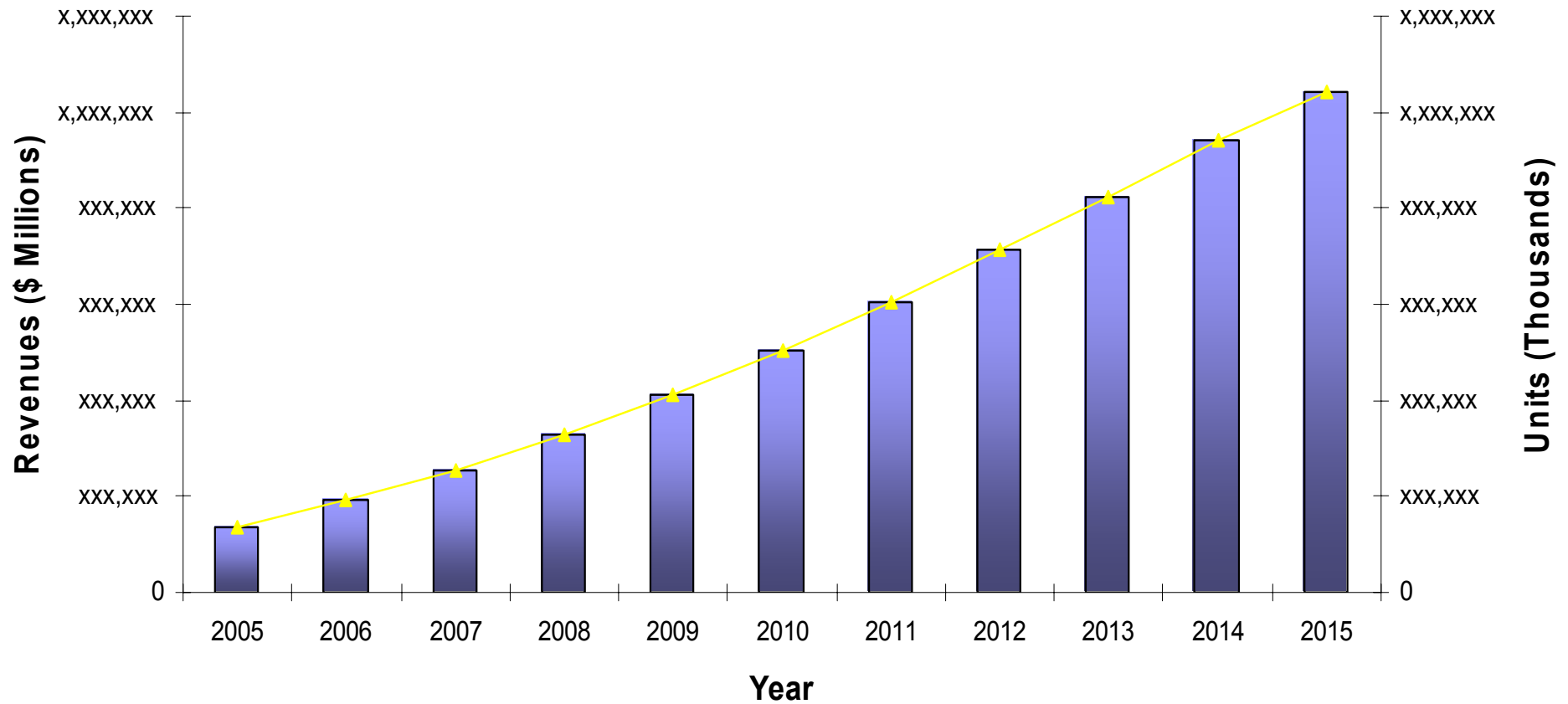
Content Filtering Products Market: Unit Sales and Growth Rate Forecasts (World), 2005-2015

Year	Number of Units Sold (Thousands)	Unit Growth Rate (%)
2005	xxx,xxx	-
2006	xxx,xxx	39.5
2007	xxx,xxx	32.6
2008	xxx,xxx	30.8
2009	xxx,xxx	25.3
2010	xxx,xxx	21.8
2011	xxx,xxx	20.2
2012	xxx,xxx	17.6
2013	xxx,xxx	15.3
2014	xxx,xxx	14.0
2015	x,xxx.x	11.1

Compound Annual Growth Rate (2008-2015): xx.x% *Note: All figures are rounded; the base year is 2008. Source: Frost & Sullivan*

Revenue Forecasts (Contd...)

Content Filtering Products Market: Revenue Forecasts and Number of Units Sold (World), 2005-2015



Note: All figures are rounded; the base year is 2008. Source: Frost & Sullivan

Revenue Forecasts (Contd...)

Web Filtering Products Market: Revenue and Growth Rate Forecasts (World), 2005-2015

Year	Revenues (\$ Millions)	Revenue Growth Rate (%)
2005	xxx.x	
2006	xxx.x	xx.x
2007	x,xxx.x	xx.x
2008	x,xxx.x	xx.x
2009	x,xxx.x	xx.x
2010	x,xxx.x	xx.x
2011	x,xxx.x	xx.x
2012	x,xxx.x	xx.x
2013	x,xxx.x	xx.x
2014	x,xxx.x	xx.x
2015	x,xxx.x	xx.x

Compound Annual Growth Rate (2008-2015): xx.x%

Note: All figures are rounded; the base year is 2008. Source: Frost & Sullivan