IPRO 305

Impact of Emerging Internet Trends on the Media Space
INTERPROFESSIONAL PROJECTS PROGRAM

Background

IPRO 305 is working with Comcast in order to help identify and shed some additional light to the emerging technologies that will further increase the need for Comcast to provide more and more bandwidth to its consumers.

Problem

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The overall increase in consumption of internet bandwidth as well as the need for everincreasing speeds may require ISPs to embrace technologies beyond what is currently envisioned.

Objectives and Methodology

• Conduct a study to predict the trend in internet traffic over the next 3-5 years to enable the project sponsor, Comcast, to adequately satisfy consumer demand for emerging technologies during that time period.

• Conduct surveys of IIT students to predict the trends of potential future customers of Comcast in their use of the internet.

• Research into new internet applications, their bandwidth requirements and their impact on internet data traffic over the next 3-5 years.

• To analyze the data of the surveys to make a prediction of new internet applications that will dominate internet data traffic in the future, and to predict increases of popularity of different internet applications.
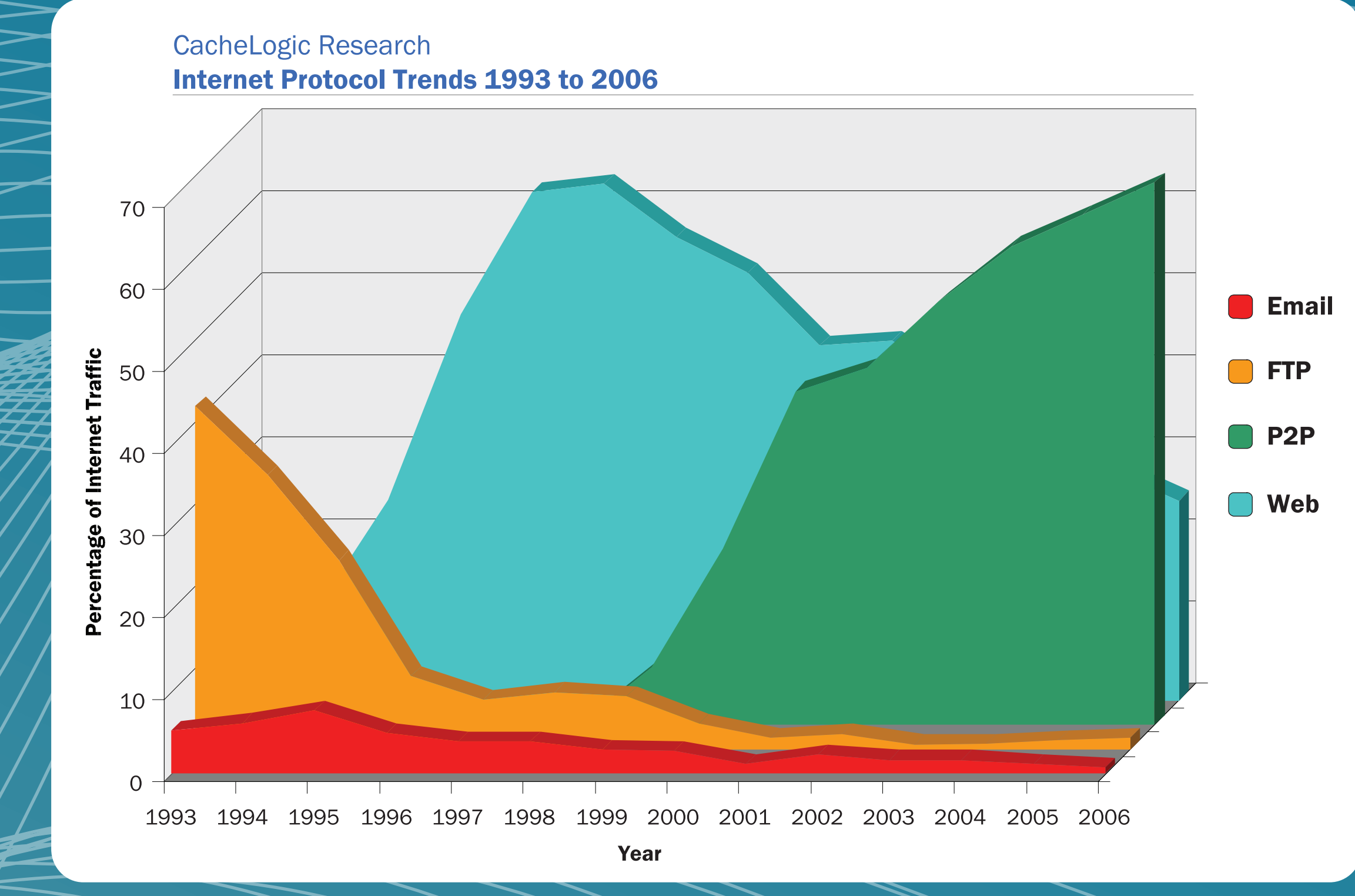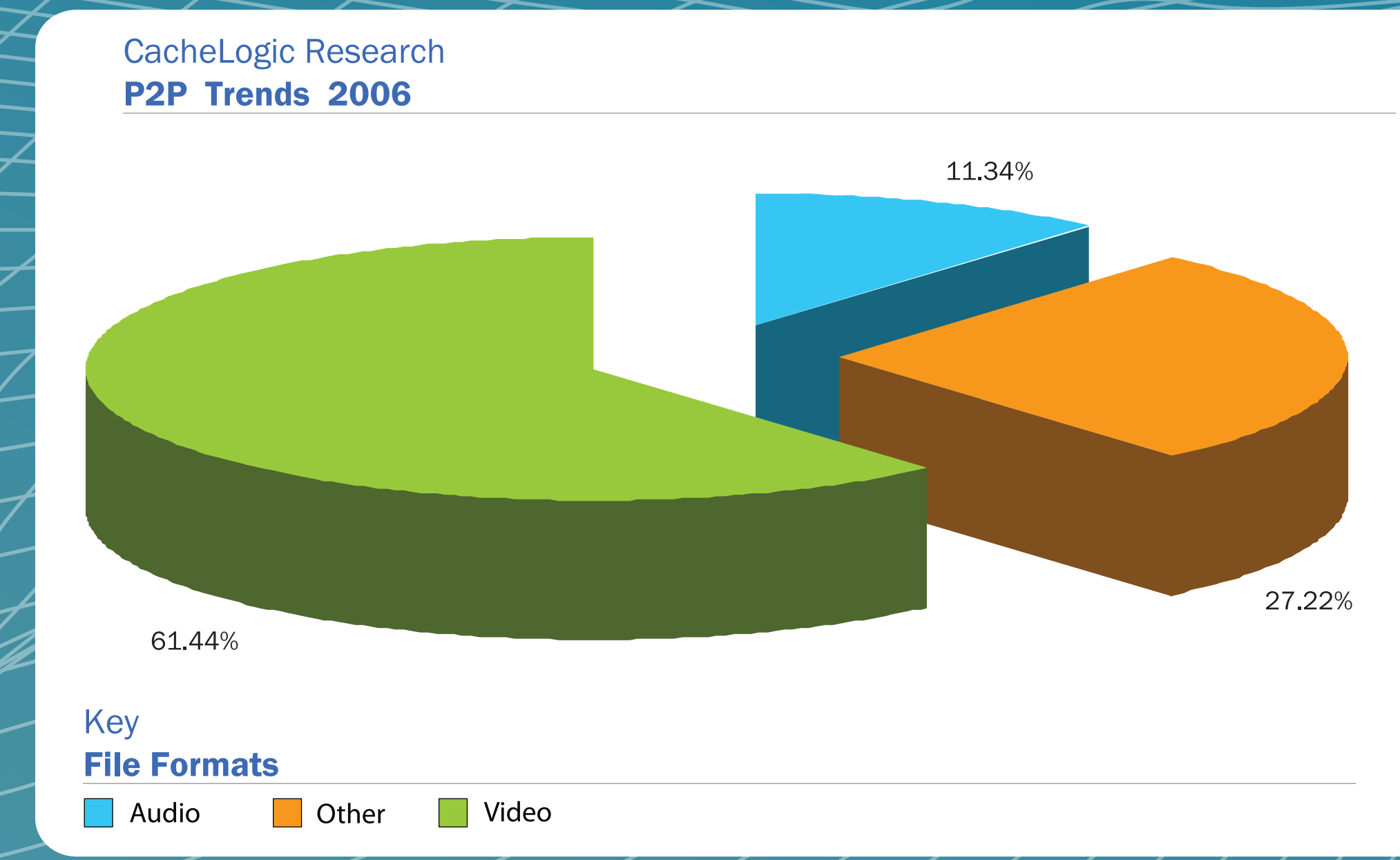
Conclusion

• New methods of exchanging files, such as bitTorrent are growing rapidly and traditional ways file exchange, such as FTP are on the decline.

• A major component of p2p traffic is video.

• Streaming video is the second most popular usage of the internet.

• Analyzing our surveys, at least 25.98% of respondents reported that they would use any application more in the future than they do currently, and for Email and Web Browsing the figure is 79.13%.

• Demand for bandwidth may increase between 2 and 4 times over the next few years.

Results

Global Consumer Internet Traffic 2006–2012

Consumer Internet Traffic 2006–2012								
	2006	2007	2008	2009	2010	2011	2012	CAGR 2007–2012
By Sub-Segment (PB per month)								
Web, email, data	509	710	999	1,336	1,785	2,337	3,087	34%
P2P	1,358	1,747	2,361	3,075	3,981	5,161	6,740	31%
Gaming	91	131	187	252	324	399	490	30%
Video communications	16	25	37	49	70	103	154	44%
VoIP	23	39	56	72	87	101	114	24%
Internet video to PC	269	647	1,346	2,196	3,215	4,501	6,216	57%
Internet video to TV	14	99	330	756	1,422	2,348	3,529	104%

Table 3.   Cisco Visual Networking Index

CacheLogic Research
P2P Trends 2006

11.34%

27.22%

61.44%

Key
File Formats
Audio   Other   Video

CacheLogic Research
Internet Protocol Trends 1993 to 2006

Email
FTP
P2P
Web

Percentage of Internet Traffic

1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006
Year

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Secondary Research

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