

## Executive Summary

In January of this year it was announced that the number of Facebook users in Japan had swelled to over 10 million. This figure is fast approaching the 15 million users of mixi. The GREE and DeNA mobile social networking sites also boast over 30 million users each. We can now reasonably assume that the majority of Japanese citizens use social networking sites, and share information over the Internet on a daily basis. However, not all information is shared with the user's intention. For example, in the United States there were reports of a mishap in which a woman received coupons for maternity goods from a general merchandise site before her father learned she was pregnant. This came about due to information gained through analysis of purchase history data that the site obtained legitimately, and was a well-intentioned offer made after tracking the user's behavior.

Guarding against malicious third parties of course plays an important role in enabling us to live our lives while using the Internet safely and securely. We must also recognize that information is being tracked on an everyday basis, and not always as we intend. On the other hand, there are ongoing efforts to provide an environment that delivers a more convenient Internet experience while eliminating annoying and criminal behavior with malicious intent to the greatest extent possible.

This report discusses the results of the various ongoing surveys and analysis activities that IIJ carries out to support the Internet infrastructure and enable our customers to continue to use it safely and securely. We also regularly present summaries of technological development as well as important technical information.

In the "Infrastructure Security" section, we give a month-by-month chronological summary of major incidents observed during the three months from January 1 to March 31, 2012, and report on the results of our statistics gathering and analyses for the entire period. We also present our focused research for this period, including a detailed account of the revised Anti-Unauthorized Access Law, information on the behavior of the DNS Changer malware as well as its countermeasures, and an explanation of the Ghost Domain Name vulnerability issue.

In the "Messaging Technology" section, we present long-term trends in spam over the past 65 weeks, and examine spam ratio trends and trends in distribution of the main regional sources of spam for the 13 weeks between January and March, 2012. We also comment on technology trends such as the adoption of the SPF sender authentication technology, and the "DMARC" system for indicating how recipients should handle fraudulent mail using existing sender authentication technology.

In the "Technology Trends" section, we examine Internet measurement, which is likely to be of increasing importance in a variety of fields in the future, and also look into the analysis and significance of the Big Data obtained through it. We also discuss the new challenges we face in the age of data, and discuss literacy regarding the information and knowledge obtained through data.

Under "Internet Topics" we give an overview of the IPv6 Launch event promoting IPv6 implementation to be held on June 6, 2012, and provide details on the initiatives of the parties concerned. This event is aimed at having IPv6 enabled by default, and comes in the wake of the success of World IPv6 Day, which was held on June 8, 2011.

Through activities such as these, IIJ continues to strive towards improving and developing our services on a daily basis while maintaining the stability of the Internet. We will keep providing a variety of solutions that our customers can take full advantage of as infrastructure for their corporate activities.

Author:

**Toshiya Asaba**

President and CEO, IIJ Innovation Institute Inc. President and CEO, Stratosphere Inc. Mr. Asaba joined IIJ in its inaugural year of 1992, becoming involved in backbone construction, route control, and interconnectivity with domestic and foreign ISPs. He was named IIJ director in 1999, and as executive vice president in charge of technical development in 2004. Mr. Asaba founded the IIJ Innovation Institute Inc. in June 2008, and became president and CEO of that organization. He founded Stratosphere Inc. in April 2012, and also became its president and CEO.