

Chapter 31

Decentralized Expertise: The Evolution of Community Forums in Technical Support

Steven Ovadia

LaGuardia Community College, USA

ABSTRACT

This chapter discusses the authority structures found within the community support forums of open and closed source operating systems (Linux, Windows, and OS X), demonstrating how, because of these forums, technical expertise is shifting away from the organizations responsible for creating these systems and into the community using them. One might expect this kind of migration within Linux communities, where in theory anyone can contribute to the code of the project, but it is also being seen in closed source projects, where only certain people, usually employees, have access to the underlying code that controls the operating system. In these situations, expertise is becoming decentralized despite the fact that members of the support community sometimes lack access to the code behind these operating systems.

INTRODUCTION

The moment one buys a personal computer, the countdown begins to the moment when the computer will fail in some way. It is one of the inevitabilities of computer ownership.

Once a computer fails, if the user cannot resolve the issue herself, she will try to find someone who can help. It sounds like a relatively simple prospect, but as anyone who has tried to repair a computer will tell you, determining the problem is often quite challenging. Is the issue related to hardware or software? Or is there another variable, like a wireless router or the Internet connection?

According to a Pew Internet & American Life Project report, 29% of surveyed users whose computers had failed in the past year had contacted user support for help, while the same percentage had tried to fix the problem themselves (Horgan, 2008, p. 6). It is not surprising that some telecommunication companies are considering offering technical support as an add-on service (Gubbins, 2009, p. 34).

The even split between users who seek formal support and those who try to repair their computers themselves is significant as it also represents a split in authority structures. For some users, vendors represent authority. For these kinds of

Decentralized Expertise

users, because the vendor made the product, the vendor is responsible for repairing the product. Other users try to fix their own product because they do not trust the expertise of the vendor, because they feel they can resolve the issue on their own, or because the vendor could not help them to their satisfaction.

As more online support forums are becoming available, many users are becoming less dependent on the centralized expertise of a vendor and are coming to rely on the decentralized expertise of a community of users. This shift is quite visible in the support forums associated with various operating systems. These forums allow users of all skill levels to post support questions to a community at large, possibly bypassing formal support channels (although, as we shall see, some vendors do provide formal support within these community areas). This type of community-driven technical support would be much more challenging to implement without the aid of the Internet.

Finding formal, centralized support for Windows is relatively straightforward, once one understands who to contact for help. Although the operating system is produced by Microsoft, Microsoft directs users to contact the computer manufacturer for assistance with the operating system.¹ It does, however, provide phone, email, and chat support to customers who purchase Windows separately from their computer.

Apple users have a less complicated path to follow for help. All Apple hardware and software have a one-year warranty and up to 90 days of technical support via telephone.² That warranty can be extended if a customer purchases AppleCare, Apple's technical support package. Apple users without AppleCare can also purchase customized support.

Linux is an open source operating system based on the Unix operating system. As an open source project, Linux is developed collaboratively, with people from around the world contributing code, time, and energy to the project. Linux is

freely available for anyone who wants it and most contributors are volunteers. Unlike OS X and Windows, it is not a commercial product, although some vendors have created commercial versions of Linux.

Its open source status means that most Linux users have no formal technical support options. Some Linux providers offer an enterprise solution for businesses, but the average home user looking to install Linux on a personal machine is pretty much left to her own devices (although there are vendors who sell hardware with Linux distributions already installed and who provide varying levels of technical support).

Open source refers to software that is developed using publicly available source code:

There are three dimensions to the concept of "open source" as it applies to computing. First, open source is a philosophy about computing and sharing programming code to improve the quality of computing. The term "open source" also refers to a wide array of operating systems and applications that have been developed under this philosophy, and, finally, it represents a general approach to the treatment of intellectual property, usually in reference to licensing software or related documentation. (Tomer, 2002, p. 155)

Users seeking technical support usually visit forums based upon their Linux distribution (a distribution is a more specific version of the Linux operating system), so an Ubuntu distribution user who cannot connect to the Internet on his Dell laptop would probably start his research with a search of the Ubuntu forums.³ Even if a user does not know he wants to search a forum, forums tend to come up high in Google searches for Linux distributions and problems. At time of writing, a Google search for "Ubuntu no volume" has its top two results from forum sites, with Google giving users the option to pull more results from forums. Closed source operating systems like OS X and

14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/decentralized-expertise/120936

Related Content

Designing a Framework of Ethnomedicinal Plant Knowledge Integration Using OSS

Piyali Das (2021). *Research Anthology on Usage and Development of Open Source Software* (pp. 466-479).

www.irma-international.org/chapter/designing-a-framework-of-ethnomedicinal-plant-knowledge-integration-using-oss/286589

Communication Network Characteristics of Open Source Communities

David Hinds and Ronald M. Lee (2009). *International Journal of Open Source Software and Processes* (pp. 26-48).

www.irma-international.org/article/communication-network-characteristics-open-source/41947

A Novel Anti-Obfuscation Model for Detecting Malicious Code

Yuehan Wang, Tong Li, Yongquan Cai, Zhenhu Ning, Fei Xue and Di Jiao (2017). *International Journal of Open Source Software and Processes* (pp. 25-43).

www.irma-international.org/article/a-novel-anti-obfuscation-model-for-detecting-malicious-code/196566

The Social and Economical Impact of OSS in Developing Countries

Alfreda Dudley-Sponaugle (2007). *Handbook of Research on Open Source Software: Technological, Economic, and Social Perspectives* (pp. 102-114).

www.irma-international.org/chapter/social-economical-impact-oss-developing/21182

Open Source E-Learning Systems: Evaluation of Features and Functionality

Phillip Olla (2012). *International Journal of Open Source Software and Processes* (pp. 33-43).

www.irma-international.org/article/open-source-e-learning-systems/101216