Chapter 8 Software Effort Estimation for Successful Software Application Development

Syed Mohsin Saif

https://orcid.org/0000-0001-7237-8828

Islamic University of Science and Technology, India

ABSTRACT

The recent advancements in information and communication technology (ICT) have inspired all the operational domains of both public and private sector enterprise to endorse this technology. Software development plays a crucial role in supporting ICT. Software effort estimation serves as a critical factor in software application development, and it helps application development teams to complete the development process on time and within budget. Many developmental approaches have been used for software effort estimation, but most of them were conventional software methods and therefore failed to produce accurate results when it came to web or mobile effort estimation. This chapter explains different types of software applications, software estimation models, the importance of software effort estimation, and challenges faced in software effort estimation.

INTRODUCTION

The current age is the era of information and communication technology (ICT). The diverse ICT enabled modalities has inspired almost all the operational domains of both public and private sector enterprise to endorse this technology. All these advancements made in the field of Information and Communication Technology is deployable when there is an appropriate underlying software framework to make it functional. In real essence, it is this software component that has revolutionized the modern age and has also facilitated humankind with its sophisticated serviceability at every corridor of humanity.

The Merriam-Webster dictionary defines software as a set of programs, procedures and related documentation associated with a system known as a computer program (Merriam-Webster). The most critical and challenging aspect is to design a mechanism to develop these computer programs. The design

DOI: 10.4018/978-1-6684-3702-5.ch008