

## Chapter 12

# Sustainable Software Lifecycle for Green Consumerism

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### ABSTRACT

*In recent years, consumers are very concerned about environmental issues. However, they often face difficulties to regard this during purchase. This more preponderant domain of ICT includes the scopes of digital media consumption and e-platforms. Cell phones outfitted with sustainability software can be profitable for the marketers by considering consumers' choices in regard to their environmental and biodiversity impacts. This chapter seeks to address the accountability of the digital consumers who care to keep the earth green through their purchases and simultaneously those who design and administrate these digital products that include senior and mid-level professionals from industries and from government authorities.*

### INTRODUCTION

Sustainability and green development, have turned out to be the prime issue during the most recent quite a few years. Software lifecycles firmly influence our regular daily existences in numerous viewpoints and in differing settings. Therefore, supporting sustainability in software architecture building unequivocally is probably going to substantially affect making our planet greener over the long haul and enhancing our society and additionally our surroundings. Essentially, “Green and Sustainable” applications ought to be as sustainable as would be prudent. This implies financial, societal, environmental effects, and effects on individuals that outcome from the product over its entire lifecycle, ought to be as limited as it could be expected under the circumstances.

It was conferred in Rio+20 UN Conference entitled “The future we want” on Sustainable Development in June 2012, the world pioneers affirmed green economy policies in the context of sustainable development and poverty eradication (Green economy - The Future We Want, 11 September 2012) (United Nations General Assembly, 2012). The outcomes and synopsis of the Rio+20 Conference were numbered in 283 points that became the accountability of Governments to ensure within their reach of

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governance. It simply illustrates to monitor and motivate the business plan and strategies, supply chain and marketing policies of Software development industries, IT services related companies and startups to follow the minimal conventions, that turns out their product to be green for the consumers as well as for the earthly atmosphere. Consequently, gaining proper knowledge based on practical research over the topic is highly appreciable and brings significance to departments and individuals from both ends (Government departments and company policy makers). Let's proceed with this drive to move on with this chapter, henceforth it will put on some lights on the facts and methodologies to its readers. The potential objectives are-

1. To explain the underlying obscure phenomenon of a digital application, that could consequently affect the earth
2. To provide indications on the measures that could be taken to counterpart the global sustainability flaws of web and digital apps
3. To inspire researchers digging deep to set optimal standards for the cross disciplinary approach of sustainable IT product development and green marketing

A large amount of existing mobile applications was reviewed for sustainable consumption to evaluate their straightforwardness, their legitimacy, regardless of whether the associations amongst utilization and biodiversity effects are accessible to consumers, and whether sustainability appraisals are steady. The survey found a few applications that met the hunt criteria. Sustenance and administration items were the most ordinarily evaluated, the supportability assessment criteria were not openly available for a significant number of apps, and few connections amongst utilization and biodiversity preservation were made.

An ideal software would have the transparency and should overcome these lacking to conquer the authority legitimacy and need to utilize straightforwardness, sustainable evaluations. This leads to several obvious concerns. In which extent, web-applications, e-media giants are committed to their users' data privacy? Is it safe to apportion an individual's location with Google Maps? Or is it tracking down their each and every daily real-life activity? Does Amazon really keep consumers' credit card data safe? Who else can reach the user's shared pictures and life events on Facebook? These questions could relate the 3.6 billion consumers all over the world, who have access to the internet. Therefore, software industries and even small IT startups ought to take account of the sustainability and data transparency issues to mitigate this sort of questions which may eventually popup in consumers' mind.

The fast industrialization in Asian market and the consequent rapidly elevating utilizations of software, desktop applications, web applications and mobile apps needs to care differently than the more stable market of America and Europe. As of late, the improvement of open arrangements and the resultant industrializations in Asia's significant economies have started to react to worldwide issues. For example, environmental change, notwithstanding nearby concerns relating to territorial contamination and administration of information exchange policies. These patterns mirror the expanded awareness in Asia of the interdependence on long term monetary prosperity of the area being dependent upon utilizing ecological and human assets admirably and economically by enhancing IT applications. Which requires applying Empirical Studies in advance to research this issue from the view of global media as well.

The globalization of agricultural supply moves the production model into one overwhelmed by multinational organizations, customer practices are progressively applicable as a potential answer for relieving the ecumenical sustainability crisis. In a more extensive setting, political consumerism as a method for communicating one's political position through selections of producers and items has been

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