Waldstandort beurteilen – Vom Handbuch zur Android App

Subject: Informatics

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At present, it is estimated that more than 80% of the Swiss population has a smartphone (Microsoft 2013). With this little tool has spread to a considerable speed: it is not uncommon to see a forest manager contacts and appointment professionals using their smartphone or capturing its observations on the ground through built-in camera and GPS.

Introduction

Use of a smartphone as a measure, capture, and data storage limit investment costs and offers the opportunity to spontaneously make statements in the forest, because the required hardware is always at hand . Finally, use of new technologies can give new incentive to forest inventories and make them more attractive, especially in the eyes of new generations of foresters. Compared to «traditional» methods like Handbook, reach the information and save them with a smartphone can be advantageous to different points of view. Since the smartphone is also used to capture, processing, and saving data, it is not necessary to invest in a computer field or enter data on paper in the forest.



Implementation

Forest Phytosociology is a smart phone Application which was developed to be used as a simple, efficient and reliable means for forest management. The application makes it possible to receive comprehensive information about the forest soil, vegetation and different plants in the concerned location and this will ease and accelerate the process of decision making in management. Using this application, the forester may select the concerned plants and examine the forest communities related to the selected plants; it is also possible to save the selected items along with photos and location (the location is identified using GPS). The saved items may be shared with others via internet. Forest experts can identify the type of soil using professional charts taking into consideration its colour. This can be easily done with the help of smart phones with touch screen and visual presentation; the forester may make use of different charts, choose the concerned forest communities and examine them. This application offers comprehensive information about plants along with photos and adequate soil conditions for the plant in question.

Result

Finally, the project has resulted in achieving the following outcomes:

Then the program can be used as an alternative to the books and e-books which are portable and enjoys accurate and complete information. This program facilitates the selection of desired plants and their associated Forest Phytosociological Unit, recording and storing the required information and is an appropriate alternative to traditional notes which are a saving in paper consumption. In addition, it provides forester with more features such as GPS positioning and saving plant combinations of location as well as the geographical particulars of location.



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