



Smartbasket: an app for mushroom collectors

Introduction

The increasing activity of collecting and trading wild mushrooms has led many public administrations to regulate the use of mycological resources. Shortcomings have been detected in terms of legal regulation and the professionalization of collectors. As a result, this project (OG Pinea) seeks to manage the regulation of the mycological resource and proposes the use of technological tools. Priority is given to guaranteeing sustainability in harvesting, traceability in the value chain and generating useful information for both, the collector and the business sector.

Approach and main results

Among the different proposals developed by the OG, the Smartbasket application has been selected as an innovation. This tool is a data collection device. It is a pedagogical tool based on learning through gamification techniques, being a mobile technology and accessible to all users (GPS, camera, audio...). These techniques are based on learning that transfers the mechanics of games to the educational-professional field to achieve better results. In this case, the more collecting areas you register in your application, the higher your ranking will be compared to other users. In addition, you will be able to access a greater number of species identification queries. Smartbasket aims to involve society through Citizen Science tools. The aim is to stimulate active collaboration in the collection of field data from collectors and lovers of nature and the mycological resource, as well as to open a channel of information with society and raise awareness about the need to respect, care for and protect our mycological resource. Within the application we find the following features:

USER ROLES: The possible user roles are: collector, identifier, collaborating professional and administrator. Each of them has access to various features of the app that facilitate their work.

SETALS (collection areas): The app user can manage his collection areas through smartbasket, identifying species, location, date of sighting, etc.

WARNINGS: The smartbasket warning functionality allows the user to report bad practices detected in the forest. It also allows the user to collaborate with the system by sending data related to the mushroom market, which become part of a BigData aimed at facilitating the sustainable management of the mycological resource.

RANKING: As a recreational component, smartbasket recognizes the participation of the expert identifiers and that of the users, collected in ordered lists where the identification is only by the user's alias. Each user has also an account of credits that increases with his participation and use of smartbasket: each time a user

participates in smartbasket, the number of credits increases. Each user also has a credit account that increases with his participation and use of smartbasket: each collected area, itinerary or notice adds credits to the user's account, which can be invested in requesting identifications. REQUEST RESOLUTION BY THE IDENTIFICATION EXPERT The request for identification of a species must be accompanied by one or more photographs taken at the collection site. The expert identifier has the capacity to identify species through the photographs sent by the user collector in the identification requests.

Lessons learned



The digital skills of the user collector are highly variable, as the activity is performed by a wide demographic profile. The data collection App has to have a design that is very simple and easily understandable by less digitally skilled users. Functionalities have to be developed that connect collectors to each other, for mutual transfer of knowledge and information. One initial difficulty is the reluctance of collectors to share information about their mushroom collecting areas, so prior work must be done to build trust and provide assurance that the data collected through this application are confidential, are not shared with other users and are for their exclusive use for analysis and research.

The information presented in this factsheet was developed by the FOREST4EU partner, drawing on the innovations and knowledge generated by the indicated operational group with their explicit authorization.

Further information

https://www.youtube.com/watch?v=dLQ732Zp_J8&ab_channel=FundacionCesefor
montse.ganado@cesefor.com



 <p>Funded by the European Union</p> <p>Funded by the European Union (Grant n. 101086216). Views and opinions expressed are however those of the authors only and do not necessarily reflect those of the European Union or REA. Neither the European Union nor the granting authority can be held responsible for them.</p>	 <p>CORAZÓN FORESTAL, espíritu investigador</p>		 <p>FOREST4EU</p> <p> FOREST4EU Project</p> <p> FOREST4EU Project</p> <p> info@forest4eu.eu</p>	<p>Website</p> 
--	--	--	---	--