



PRACTICE ABSTRACT

Digital technology

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LEŚNIK+: A NEW APPLICATION FOR FOREST MANAGEMENT IN POLAND

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Lesnik+ is a newly-developed forest management software application, based on the Android system, which enhances timber recording in forestry management practices. Implemented by State Forests in Poland in September 2019, as part of a strategic project on mobile technologies, it replaced the former "Leśnik" based on Windows Mobile.

Basing the new application on the Android system made it possible to switch it to smartphones, to fulfil the application's full potential. Leśnik+ is a big and integrated system of five, formerly separate, applications used by State Forests in Poland. The greatest benefits are related to the new data transfer functionality and the map module, which enable better communication, data coordination and management within the Information System of State Forests in Poland (SILP).

The application supports forest professionals by providing an overview of forest areas, in performing the necessary documentation, and in planning forest cultivation. Leśnik+ offers a field mapping service, general inventory management, and a full timber turnover documentation function. All data can be conveniently recorded from the office or from the forest.

Over each year, mobile forestry devices record a turnover of over 40 million m³ of wood with a value of approximately EUR 2 billion, which proves the importance of mobile technologies in Polish forestry.

Application scenario

Software for enhanced timber recording in forestry management practices

Digital technologies

Mobile application, software, desktop application, WebGIS

Socio-economic impact

- Economic: organisation, financial autonomy, value chain transparency, work efficiency
- Environmental: management of natural resources in forestry, protection
- Social: access to information, education

More info:

<https://www.lasy.gov.pl/pl/wideo/telewizja-lasow-panstwowych/wideo/lesnik-najnowszy-sprzet-i-aplikacja-dla-kazdego-lesniczego-i-podlesniczego>



Purpose of the tool

Leśnik+ is a software application developed by State Forests in Poland for more efficient recording of timber turnover and the work of contractors, but also for issuing timber legality certificates in non-state forests. The first version of this mobile application was released in 1997, alongside the development of an integrated and uniform Information System of the State Forests in Poland (SILP). Since 2007, the second generation of devices was based on the Windows Mobile system. However, as Microsoft announced the end of support for this platform in 2020, in 2014 State Forests started to work on the implementation of new Android-based technologies, including Leśnik+.

Description of the tool

Leśnik+ is a forest management software application that has three main improvements compared to its previous version. Firstly, it integrates the functionality of five mobile applications, for timber turnover, data transfers, measuring trees intended for felling, planning works of outside contractors, and mapping services, which were used separately before 2019. Secondly, data transfer is easier and faster, partly because it runs inside the application and not within separate tools. Lastly, is the integration of a basic system with a map module, which, apart from visualising and filtering map layers, is important when adding data and documents, after locating in-field positions via GPS.

Leśnik+ has been implemented by almost 4 000 registrants. However, eventually the system will operate on approximately 10 000 devices used by forest workers all over Poland. The system is also available for educational purposes in forestry schools and universities which train the staff of State Forests in Poland.

Areas of socio-economic impacts

Social	Optimised human resources and enabling better access to information on forest management. The system is available to forestry schools and universities training new State Forests staff.
Economic	Advanced timber management, enhanced efficiency of in-field operations, full coordination with other elements of the system (previously separate applications), upgraded quality of the former mobile application used since 1997.
Environmental	Improved management of natural resources in forestry – Leśnik+ informs about restrictions related to nature protection (notes about zones of strict protection, Natura 2000 sites, protected species, priority habitats, etc.).

