Product name: **ARPHA**
Name in brief: A full-featured open access publishing platform
Company: **Pensoft Publishers Ltd., Bulgaria** (https://pensoft.net/)

Year 2020

INNOVATION	APPLICABILITY & SUSTAINABILITY	RESULTS
ARPHA is the world's only system that can accept complex manuscripts (incl. images, in-text, references, cross-referenced citations of figures, tables, literature, supplementary materials, via API. It consists of interconnected, independently functioning journal platforms: 1. Entirely web-based, collaborative authoring, peer-review and publication workflow; 2. Document-based submission, peer-review and publication workflow.	ARPHA is offered as SaaS and allows users to build their own publishing solution to manage and host journals, books, proceedings, institutional documents, conference abstracts. It stands for Authoring, Reviewing, Publishing, Hosting, and Archiving put together all in one place, for the first time. As a problem-oriented tool it can fast track dissemination and, hence, implementation of scientific knowledge to address the green & blue city's challenges.	ARPHA is suitable for a wide range of research outputs, including open access journals, books, conference abstracts, proceedings, institutional documents, and reports. Any combination of those is also available for clients seeking a more holistic solution.

Three key DRIVERS	**1. Personality of the founder** Very known name in semantic publishing, Prof. of ecology at the BG Academy of Sciences (AC) and Ph. D at the Russian AC. Author of OpenBiodiv, one of the first specialized software for biodiversity research (Exeter Software, NY, 1991) and one of the first computerized bibliographies, CARLIT & CARRUS (1993).	**2. First in the market** In 1992, Pensoft became one of the world's leading biodiversity publishers with more than 1,000 books and e-book titles published to date. In 2008 - first open-access journal ZooKeys. In 2010 - the first to implement semantic tagging and enrichment of published articles as a routine editorial practice.	**3. The growing interest in open-access (OA) publishing** It makes the work of scientists more discoverable and visible. OA helps published research to get noticed and get credit. The OA articles are fully indexed, searchable, machine-readable, and available to text and data mining tools over the world.
Three key BARRIERS	**1. Lack of enough specialized staff with software skills** Overcame by investing in the training, motivation, and retention of in-house IT specialists with versatile skills and knowledge in the field of technologically advanced scientific publishing. Providing employment for promising Ph.D. students in biodiversity informatics over the course of their studies through the Marie Curie actions research fellowship program.	**2. Data accessibility, findability and management** Overcame by continuously developing solutions aimed at opening up the research data, freely available and easy to find, integrate, reuse, reproduce, cite and build on. Using Linked Open Data in the publications to cross-link a wide range of data types from across sources, so that studies are easier to reuse, reproduce and elaborate on.	**3. High global competition level (old & large publishers)** Overcame by the policy of providing diverse and often unique technological services and software solutions offered at reasonable prices. The clients can always rely on a highly personalised and flexible attitude. Being launched by scientists, the company is well-positioned to figure and address the needs of clients.
Three key ENABLERS	**1. Continuous innovation** It launched the first-ever, end-to-end, online, XML-based publishing, that supports the full life cycle of manuscripts, from authoring to peer-review, publication, dissemination (2013). Initially implemented at Biodiversity Data Journal, the Writing Tool is now upgraded to ARPHA.	2. **The operational model** ARPHA integrates the pre-submission, post-publication review & consolidation into a single editor's version, import / download of small data into / from article text, semantic enhancement mark-up, automated dissemination, and integration with ZENODO.	**3. The value of the knowledge is growing** Open access makes the knowledge closer to researchers, public, decision-makers. The immediate and unrestricted access to the latest research creates an equitable system of knowledge that is open to citizen.
Three key IMPACTS	**1. Circular city economy** The easy access to the latest researches relevant to life-pressing challenges, such as air pollution, health hazards, natural disasters, makes possible improvements of the quality of life in cities.	**2. Level of collaboration** By making researches accessible to large community it prompts collaborative and inclusive efforts across disciplines and professional fields, incl. on smart city level.	**3. Accumulated knowledge** More than 11,500 open access articles in a number of academic journals, hosted on ARPHA, contribute to the state of knowledge about cities and societies.
What's next	The accent of the ARPHA platform in the near future will be on studying needs for new services and tools and exploring niches within the scholarly publishing landscape for finding missing solutions, new technologies, and practices.		