



# From desktop to Software as a Service:

transforming Greece's most widespread library software "ABEKT" into a brand-new cloud service "openABEKT"

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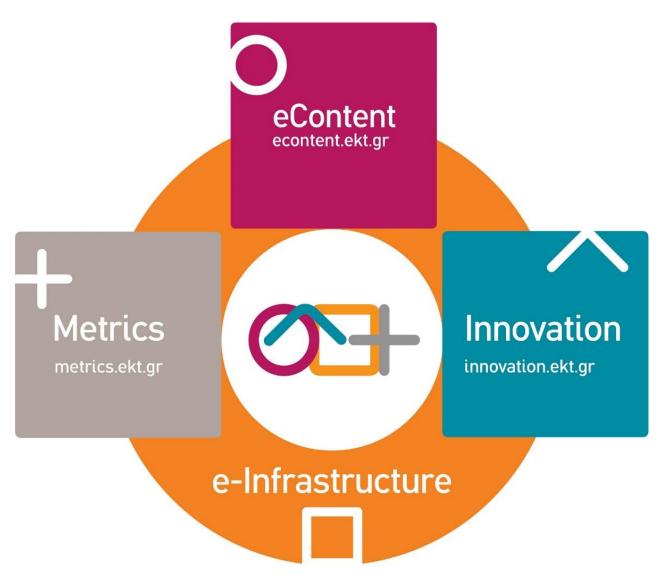
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Head of ABEKT Development Unit

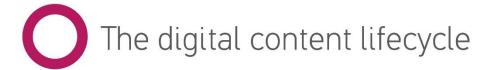
**Information Systems Department** 

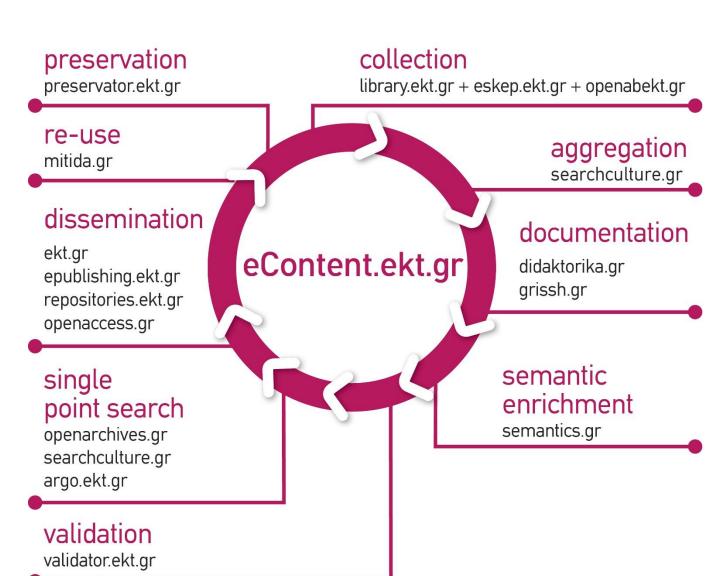


# The National Documentation Centre / EKT Our strategic pillars











#### **EKT** and libraries

Part of our longstanding role is to:

- Develop ABEKT, EKT's library automation system, for the past 30 years.
- Connect libraries with each other and with international library networks and databases
- Support the national Network of Research and Technology Libraries
- Develop the National Union Catalogue of Science Magazines
- Develop aggregators and union catalogues for digital content

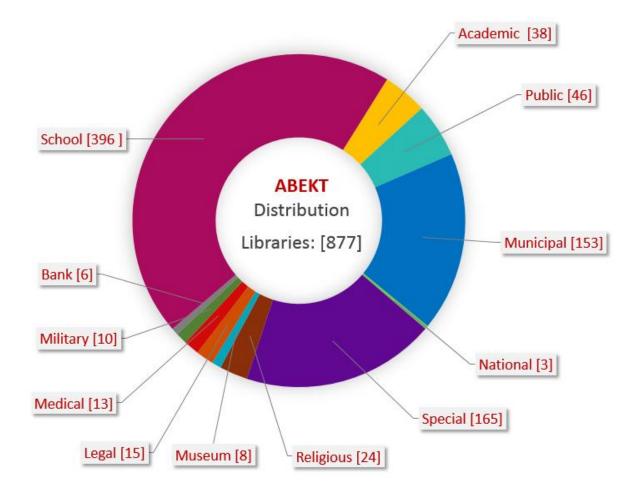








#### ABEKT user base







#### ABEKT community

Since 1999

2.830

people trained to use ABEKT

Since 2000

53.000

people supported
through HELPDESK





#### Time for change

Current **economic situation** is preventative for costly hardware, upgrades and maintenance



The library system needs a user interface that can be used by non-experts

Need to open up digital content and link the contents of a library catalog to web sources and applications. Especially for educational purposes.

Most libraries operate in their physical space often neglecting the impact and benefits of a digital space



#### Time for a new cloud-based service





- Demand of making full use of national infrastructures and economies of scale
- Flexible and immediate updates of metadata formats
- Digital content management

- Improved staff& end user interfaces
- Library workflows
- New content discovery options and services
- Linked data....

**openABEKT** A cloud-based service. Easy to use & sustainable.







user-friendly



sustainable



## openABEKT allows you to have a ready-to-use, autonomous application



openABEKT Your application openABEKT
Central Public

a customization tool for your individual application

a multi-tenant system generating your autonomous application Access Catalogue

saas.wizard.ekt.gr

you.openabekt.gr

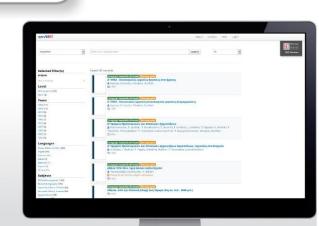
content from all libraries, in a single interface

catalogue.openabekt.gr

#### openABEKT Central Public Access Catalogue

catalogue.openabekt.gr

Discover content from all the libraries using it



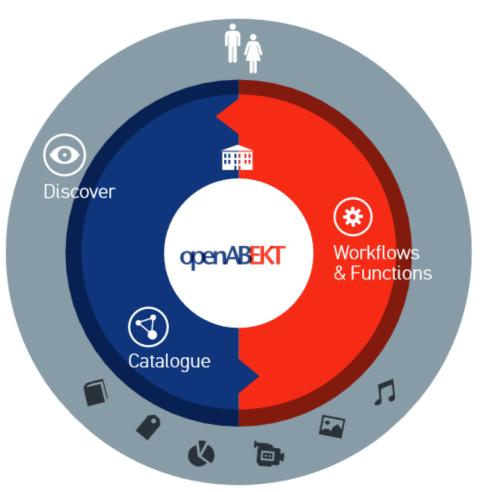


#### The platform offers 3 environments





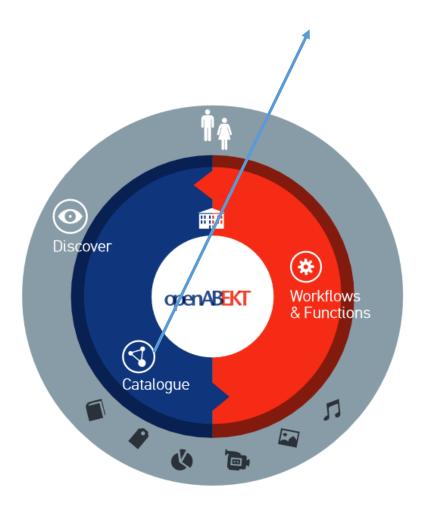
Pοές & Λειτουργίες
Workflows & Functions







## Κατάλογος Catalogue

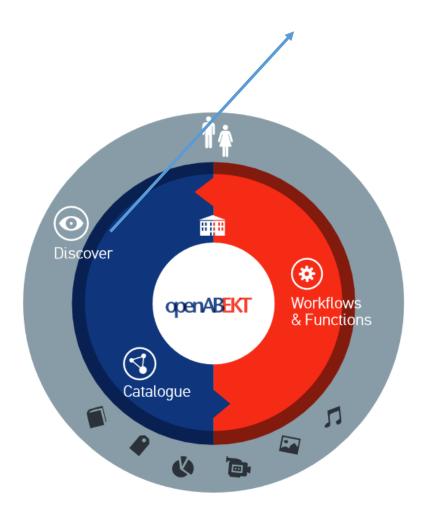


- ✓ Flexible Cataloguing
- ✓ Standardization
- ✓ Semantic links
- Basic Form
- MarcEditor
- Digital files
- Selected content for publishing
- Validated metadata
- UNIMARC
- Full exploitation rules & field values





## Aνακάλυψη Discover



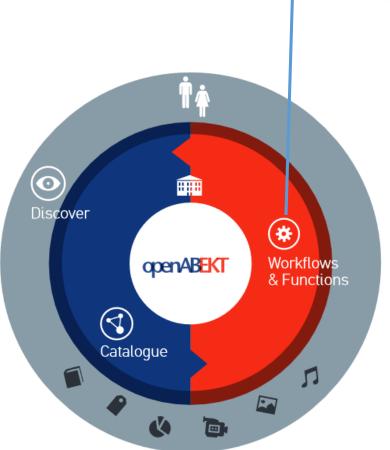
- ✓ Open Catalogue
- ✓ Shareable
- ✓ Explorable
- ✓ Usable content
- Open Catalogue
- Shareable
- Explorable
- Searchable in all metadata fields
- Reusable content
- Digital files with CC or other license

- More links between bibliographic records & authorities
- Metrics and statistics
- Environment customization





### Pοές & Λειτουργίες | Workflows & Functions



- ✓ Circulation control
- ✓ Patrons
- ✓ Statistics

- Holdings
- Patrons
- Circulation
- More workflows
- Open catalogues for staff
- Full loan history
- Metrics and statistics

#### **openABEKT** Collaborative catalogue development

#### Facilitation through:



Collaboration with the libraries for:

- New user roles (Reviewer, Cataloguer, Discover)
- New workflows
   (Accept/Reject/Under Review/Publish-Unpublish/Delete)

- Defining processes and workflows
- Organizing tasks

#### **openABEKT** Inter-library loan services

#### Facilitation through:

- Multi-tenant public catalogue, with both unique applications & union catalogue
- Libraries management
- Unique ID for users that allows access to all network libraries



## Collaboration with libraries for:

- Processes definition
- Developing the network
- Managing the network

### **openABEKT** Service workflow





### **openABEKT** An integrated cloud service provided as Software as a Service (SaaS)

Service components	What's covered	Basic	Advanced	Gold
Hosting	Hosting on EKTCloud and maintenance	٧	V	V
Storage	Till 5 times more storage for backup copies	100 GB	500 GB	1000 GB
Backups	Backups of your data hosted in our datacenter	3 months inhouse	6 months inhouse	9 months outsourced
Maximum downtime	Annual total of periods when expected performance is low or there are short downtime intervals	10 days/year	6 days/year	4 days/year







### **openABEKT** An integrated cloud service provided as Software as a Service (SaaS)

## Support & Training

With our up-to-date helpdesk and e-learning services, you are supported all the way

eHelpdesk responds to your every question, eKnowledgeBase offers FAQs and user guides and eLearning helps you learn how to use the platform.





#### • Enhanced Migration:

ISO2709 UNIMARC or MARC21, examine data quantity and quality and we analyze patterns and problems, validations, enrichments and default corrections

deals with any existing, machine readable content a library has

reports and stats so that they have a clear picture of the situation and potential issues so that they can correct it in the future

#### Custom Migration:

plus additional data formats and more enrichments and corrections which can be suggested by EKT or/and indicated by library

Through our service, we fully cover a library's migration needs through the procedures of statistical analysis and error correction so that the content that goes through each application is quality controlled and validated.



## Content Migration

#### Metadata quality & interoperability

- UNIMARC structure and characteristic,
   UNIMARC schema depiction on
   openABEKT allows it
- Record label and coded values (country, language, operation, spaces, fill characters etc.
- Error in ISBN/ISSN
- Missing fields
- Records without 7xx or \$4
- Records without 6xx
- Mixed characters, i.e. Greek words with English characters etc..
- Cataloguing rules
- Other points as specified by the library

No data import for now

Libraries send us records

we validate, perform some automatic corrections & we migrate them ourselves

develop a Migration tool

#### **openABEKT** Service strategic design

- Collaborative service design
- New model of service delivery
- Innovative aspects & future feature planning

- Prioritization for immediate needs
- Community engagement online community building
- Distribution strategies



- more workflows automation
- self-services for patrons
- business intelligence tools
- visualized statistics and metrics
- RFID technology
- smart devices

- Service work-flow modelling
- full advantage of what the cloud could offer us and our clients
- Gradual user familiarization with cloud services





Pοές & Λειτουργίες | Workflows & Functions

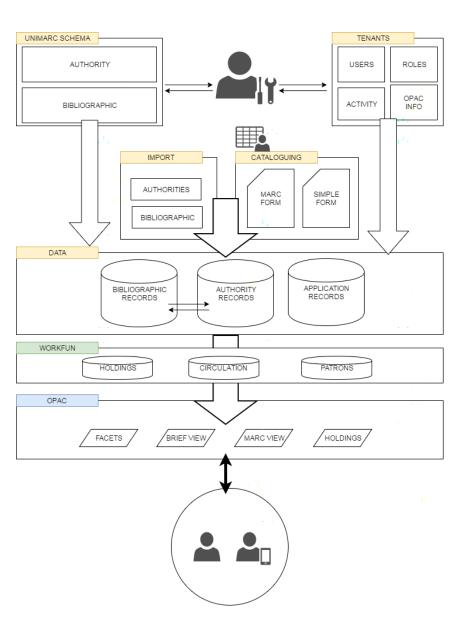
- MongoDB
- ElasticSearch
- Redis
- Z39.50 Zebra
- Ruby on Rails Framework
- Puma
- Bootstrap
- Sidekiq
- Capistrano

- PHP
- MySQL
- Nginx
- Bootstrap

#### openABEKT Server Software 2013

Operating System: Linux | Web Server: Nginx | Cashing Server: Varnish

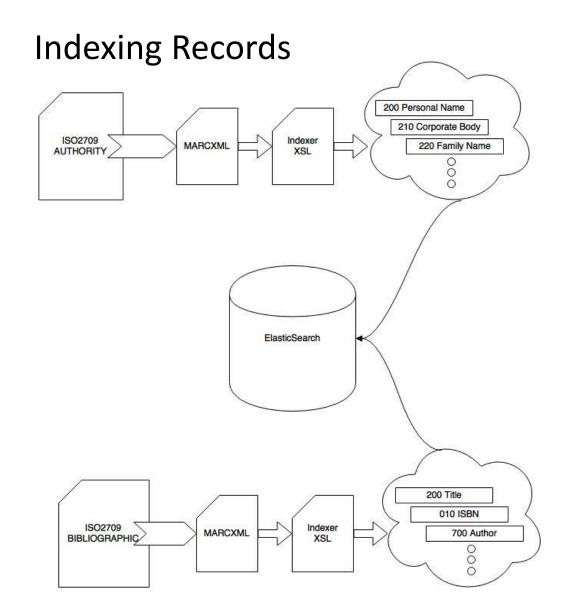










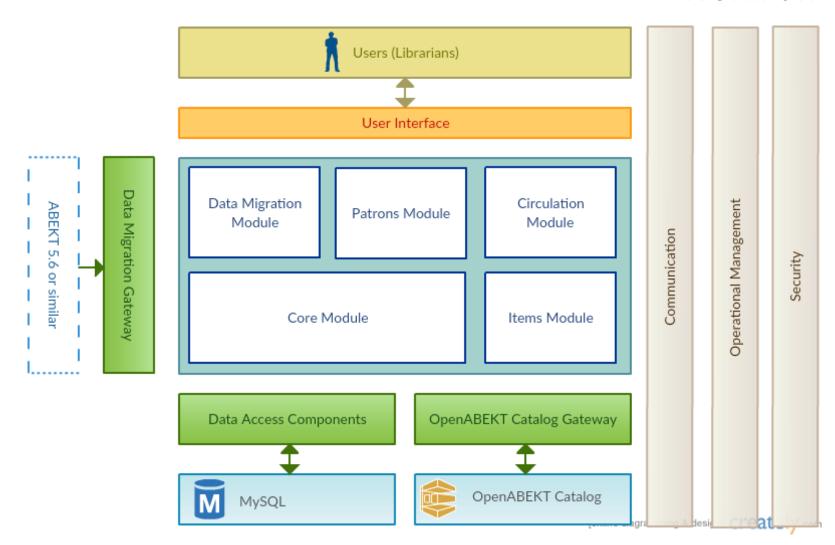






## Pοές & Λειτουργίες Workflows & Functions

#### WorkFun



### **openABEKT** Some of our users

- The Acropolis Restoration Service Library Catalogue
- The European Public Law Organization Library
- The Library of the Greek Biotope/ Wetland Centre (EKBY)
- The Catalogue of the Library of General Hospital Asklepieio
- The Public Library of Konitsa
- The Public Library of Levadia
- The Public Library of Serres
- The Public Library of Mytilene
- The Library of Holy Trinity's Sacred Patriarchal and Stavropegic Monastery of Jagaroli





















# Acropolis Restoration Service Library Catalogue YSMA

ysma.openabekt.gr

#### We received:

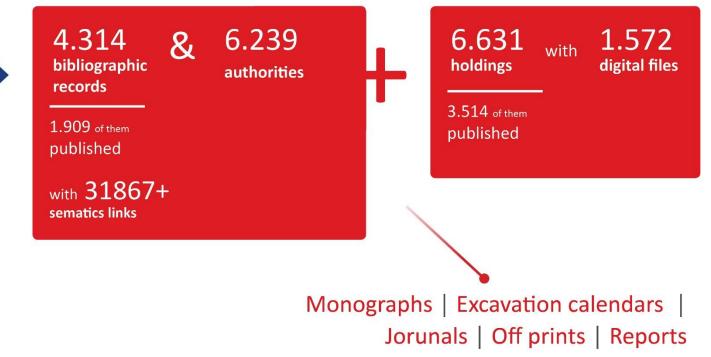
4.314

bibliographic records

in MS Access

with key word & without authorities

#### We converted that into:



All digital files in openABEKT always come with CC or other license to enable legal reuse of digital content.







grissh.gr

**90** Journals

**26.000** Articles

#### Social Sciences [10921]

- Psychology [513]
- Economics and Business [2476]
- Educational sciences [1715]
- Sociology [1981]
- Law [966]

- Political Science [1568]
- Social and economic geography [252]
- Media and communications [245]
- Other social sciences [874]

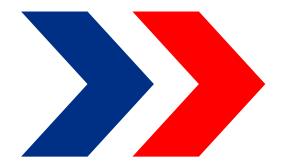
#### Humanities [25681]

- History and Archaeology [10843]
- Languages and Literature [4494]
- Philosophy, Ethics and Religion [5933]
- Arts [3359]
- Other Humanities [1024]

### **openABEKT** The future

- Sustainability strategy
  - in-house development
  - external funding
- Community building
- Web patron services
- Inter-library collaborations
  - inter-library loan services
  - union catalogues development

- Time saving workflows
  - cataloguing
  - metadata quality
  - Library's routines
- Linked open data and semantic connections
- FRBRized catalogue
- Data visualizations (metadata and metrics)



### **openABEKT** The project team

- George Stavrou,
   Head of ABEKT Development
- Eleni Angelidi,
   Head of ABEKT Services
- Nikos Vasilogamvrakis, Information Scientist, ABEKT Services
- Alexia Panagopoulou,
   Information Scientist, ABEKT Services
- Paraskevas Kamatsos,
   Information Scientist,
   Documentation Unit
- Katerina Bartzi, Information Scientist, Documentation Unit
- Panagiotis Kontaxis,
   Software Engineer, ABEKT Development

- Spilios Zidropoulos,
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- Mara Kounadi,
   Information Scientist, ABEKT Services
- Elena Lagoudi,
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   IT Specialist-Network Engineer,
   ABEKT Development
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   Software Engineer, Information Systems
- Vasilis Doumanis,
   Graphic Designer,
   Publicity & Communications
- Dr. Evi Sachini,
   Director of the National Documentation Centre

### **openABEKT** The funding











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implemented by the National Documentation Centre within the Operational Programme "Digital Convergence" (NSFR), which is co-funded by Greece and the European Union-European Regional Development Fund.





#### National Documentation Centre

National Hellenic Research Foundation

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