



# FOLIO

## Community and Software

Kirstin Kemner-Heek, VZG Göttingen

Focus On Open Science, Rome

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Who we are ...





# VZG: Headquarter of the GBV

- Common Library Network GBV
- One of six regional library service networks in Germany
- Headquarter „VZG“ situated in Göttingen, Lower Saxony



Quelle: Wikipedia



# VZG|GBV: Common Library Network

- Host for regional union catalogue (collaborative cataloguing)
- Located in a heterogenous software environment for its libraries
- Provides ILS (SaaS), ILL, portals and other services
- FOLIO project cooperation with North Rhine-Westphalian Library Service Centre (hbz), Cologne





# VZG|GBV: Common Library Network

- Using OCLC CBS since 1993 for the Union Catalogue
  - For 72 academic libraries, 400 research libraries
  - With more than 37 m bibliographic and 89 m holding records
  - 122,000 e-journals, 2,100,000 online resources (ebooks, articles)
  - Integrated ILL
- Using OCLC LBS since 1993 as ILS in 188 libraries in 30 sites
  - OPAC, acquisition, circulation, work catalogue, user management, systems administration

FOLIO





# FOLIO overview

- Development since 2016
  - Founded as open source project by EBSCO, Index Data and the OLE community (Open Library Environment)
- Goal
  - Development of a Library Service Platform (LSP)
    - Open, sustainable, innovative, flexible, enhanceable
- Target Group
  - Academic and research libraries



# FOLIO overview

- Conception and Development of a technical platform „Okapi“
- Development of „FOLIO“ as LMS on this platform
- Organization of end user applications = „apps“
- LMS development follows the design concept of
  - user experience design (UX)
  - user interface design (UI)
  - interaction design (IxD)





# FOLIO overview

- Open for
  - Libraries
  - Commercial vendors
  - Service providers
- In 2018 apps for
  - Circulation, media type independent acquisition and management, meta data management
  - Budget control, vendor data and user data management, systems administration



# FOLIO community

- New administrative home since 2016
  - [Open Library Foundation](#)
- Stakeholders
  - EBSCO, Index Data, OLE Community
- Development organizations
  - Stacks, K-Int, Qulto, @cult, FrontSide, UNAM
- Others



# FOLIO funding and staff resources

- EBSCO
- Index Data
  - Hired by EBSCO
- OLE Community
  - [Andrew W. Mellon Foundation](#) and community funded
- Engagement of other development companies and libraries

# OLE community



## Partner Institutions





# FOLIO organization

- Special Interest Groups (SIG's)
- Product Council
- Developers
- UX/UI designers
- Product owner
- Stakeholders Board



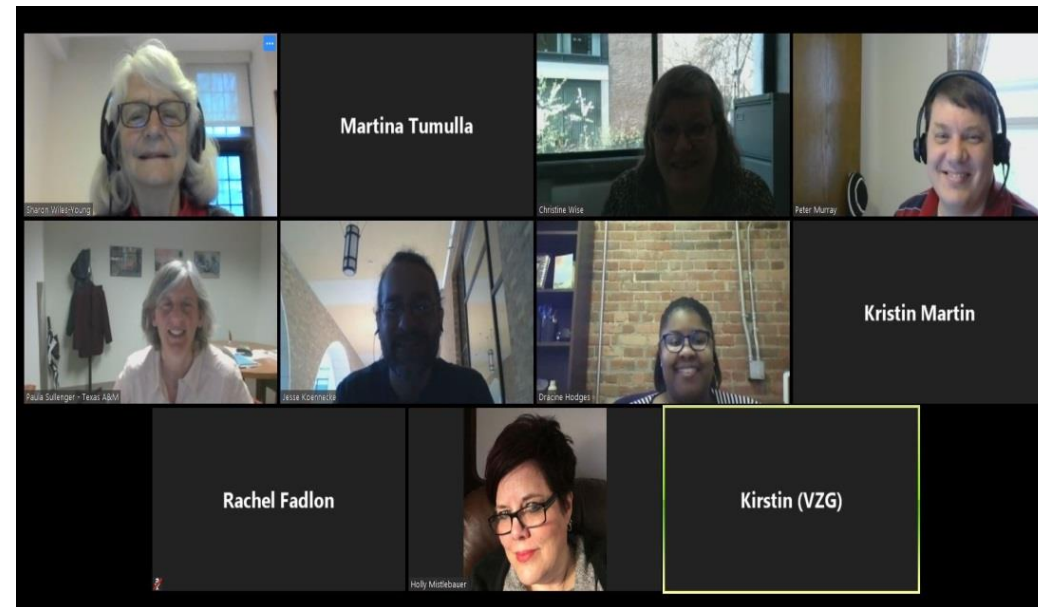
# FOLIO special interest groups

SIG's	About
<ul style="list-style-type: none"><li>• Metadata Management</li><li>• Resource Access</li><li>• Resource Management</li><li>• User Management</li><li>• Internationalization</li><li>• Consortia</li><li>• Reporting</li><li>• Privacy</li><li>• Accessibility</li><li>• System Operations and Management</li></ul>	<ul style="list-style-type: none"><li>• SIG's per topic/module/app</li><li>• Subject matter experts</li><li>• Facilitated by convener and/or product owner</li><li>• Resourced by FOLIO Product Council</li><li>• Weekly web conferences</li><li>• Definition of requirements and use cases</li><li>• Library expertise</li></ul>



# FOLIO Product Council

- Supports and coordinates SIG work
- Information hub
- Responsible for roadmap, prioritization, and resourcing
- Comprises of OLE partner libraries, EBSCO and Index Data
- Weekly web conferences





# FOLIO developers

Developer teams	Task
<ul style="list-style-type: none"><li>• Index Data</li><li>• OLE developer</li><li>• OLE developer / Mellon Foundation funded</li><li>• EBSCO</li><li>• Development companies: <a href="#">Stacks</a>, <a href="#">UNAM</a>, <a href="#">FrontSide</a>, <a href="#">Qulto</a>, <a href="#">@Cult</a>, <a href="#">K-Int</a></li><li>• Others</li></ul>	<ul style="list-style-type: none"><li>• Development lead and organisation, core team</li><li>• Core team and app development</li><li>• App development for OLE community</li><li>• App development</li><li>• Contracted development</li><li>• Independent development</li></ul>

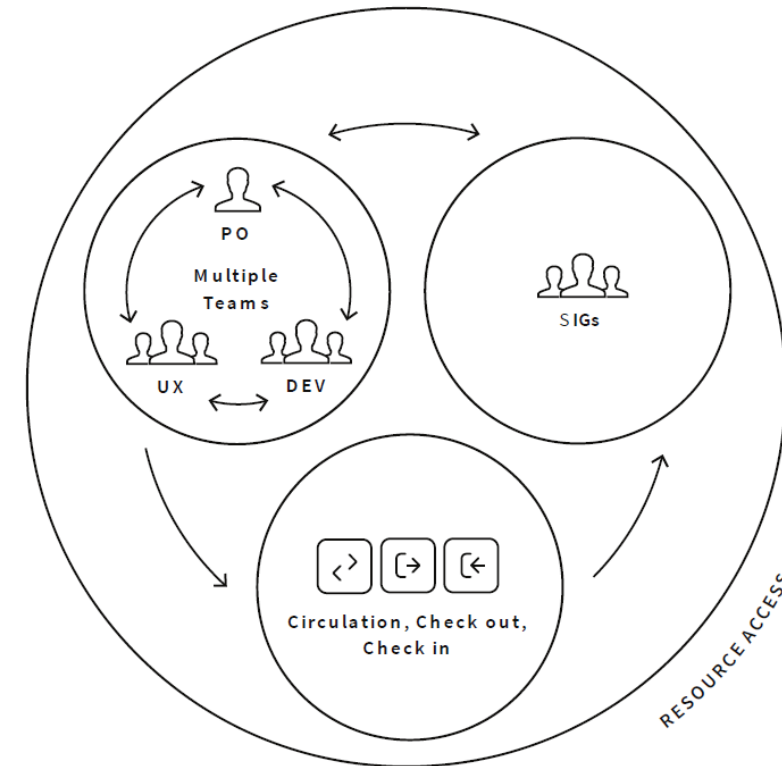
„Getting started for developers“ - see „guidelines“: <http://dev.folio.org/community/>





# FOLIO conceptual work

- UX/UI Designer
  - Base for app development
- Product Owner
  - Responsible for transfer of functional requirements into technical specifications
  - Connection to developer teams
  - Responsible for fulfilment of timeline and road map goals of his „product“ (= app)



SIGs = Special Interest Groups  
UX = User Experience Designer  
DEV = Developer =  
Softwareentwickler  
PO = Product Owner

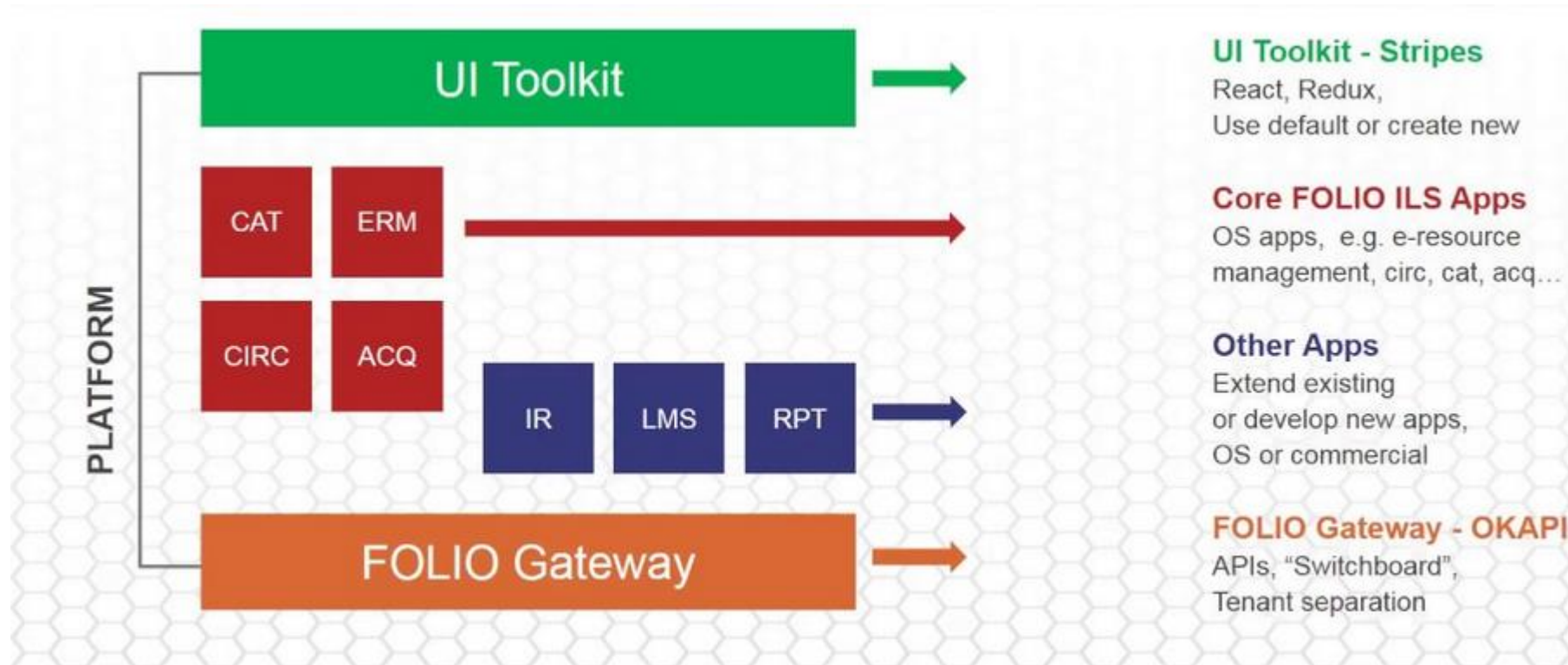


# FOLIO communication





# FOLIO technical architecture



# FOLIO software - users



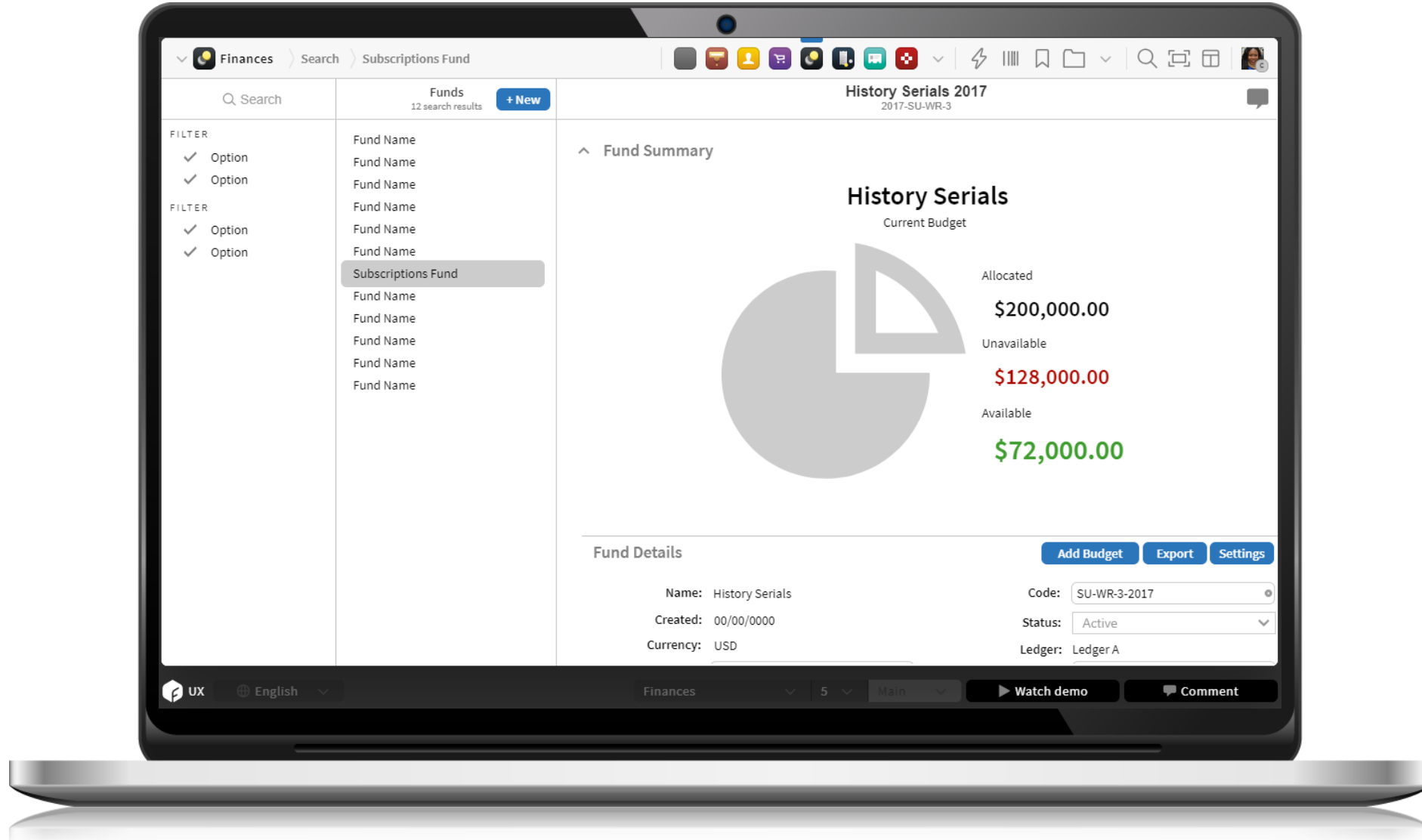
The screenshot shows the FOLIO software interface on a laptop. The browser address bar displays the URL: <https://folio-demo.gbv.de/users/view/50fb08c1-08bf-422d-9c18-429a623ac9e7?filters=active.Active&query=&sort=Name>. The interface includes a navigation menu with options like Users, Inventory, Check out, Check in, Requests, Calendar, Codex Search, eHoldings, Vendors, and Einstellungen. A search and filter sidebar is on the left, and a detailed user profile for 'Abbott, Scottie' is on the right.

Aktiv	Name	Barcode	Nutzergruppe	Benutzername	E-Mail
Aktiv	Abbott, Scottie	641332826549945	faculty	carmelo	everette@mcder...
Aktiv	Abernathy, Breana Jeffery	716216442919265	graduate	thea	carlos@lesch-ka...
Aktiv	ADMINISTRATOR, DIKU	?	?	diku_admin	admin@diku.ex...
Aktiv	Bahringer, Perry Elena	458558388361904	graduate	armand	silas@weissnat...
Aktiv	Bailey, Carlee Serenity	489537751868677	staff	fay	leilani@balistr...
Aktiv	Bauch, Ara	928013528297725	graduate	izabella	alessandra@mo...
Aktiv	Bergnaum, Dante Guido	46505838449244	graduate	lenny	jayne@shahanah...
Aktiv	Bergnaum, Madison Maxwell	16853263739072	faculty	zion	sheldon@kuhn-l...
Aktiv	Bode, Ana Rhett	247573092858278	staff	nicolette	ariane@carter-a...
Aktiv	Bosco, Kaylee Marjorie	955897896250912	faculty	koby	connie@kris-anc...
Aktiv	Botsford, Estefania Melissa	436386502563141	undergrad	rupert	andre@oreilly-ti...
Aktiv	Brakus, Odie Jordyn	66779187351794	staff	benedict	eva@towne-and...
Aktiv	Bruen, Isobel Tremaine	448463220180443	undergrad	duice	abigayle@sanfo...
Aktiv	Buckridge, Noble Ila	414311248044501	undergrad	vince	keyon@wolff-je...
Aktiv	Cartwright, Harrison Kim	838976874239499	faculty	gerard	eda@bogan-ruti...
Aktiv	Cassin, Jordyn	634409588590390	graduate	michelle	earlene@connel...
Aktiv	Champlin, Mathew Ashtyn	18156165454904	staff	jessika	lola@sipes-king...
Aktiv	Christiansen, Rhea Kyler	79607833138133	undergrad	halie	yvonne@bartole...
Aktiv	Cormier, Alvah Vena	287113105808604	graduate	stephania	roberta@howell...
Aktiv	Cremin, Kaylie	327518106296597	graduate	amyia	kenya@hoeger-z...
Aktiv	Crist, Hosea	192390730871373	staff	mellie	lois@kozey-orei...
Aktiv	Cummings, Rey	173833563235881	faculty	emely	layla@halvorsor...
Aktiv	Dickens, Wilfrid Veronica	442821977852371	undergrad	cora	emelia@homeni...
Aktiv	Durgan, Nasir Connor	258223971286259	undergrad	christy	cieta@keeling-g...
Aktiv	Eichmann, Graciela Edyth	102088605786054	faculty	tanner	ruben@bosco-w...
Aktiv	Feeney, Treva	607006815785958	staff	audreanne	garrison@larson...
Aktiv	Fisher, Deangelo	171255589091135	faculty	jace	jessy@murray-k...
Aktiv	flotho, flotho flotho		staff		florent.thomas@...
Aktiv	Friesen, Darwin	917360985003973	faculty	daphney	brandy@hickle-i...
Aktiv	Friesen, Derrick Kaci	18466293783824	graduate	bulah	aurelie@baumb...

The detailed view for 'Abbott, Scottie' shows the following information:

- Benutzerinformationen:** Record last updated: 9.5.2018 07:41
- Erweiterte Informationen:**
  - Aufnahmedatum: 2.4.2017
  - Externe System-ID: [empty]
  - Geburtsdatum: 18.6.1971
  - Folio-Nummer: 50fb08c1-08bf-422d-9c18-429a623ac9e7
- Kontaktinformationen:**
  - E-Mail: everette@mcdermott-schulist.gt
  - Telefon: (479)814-0762 x02883
  - Mobiletelefon: 804.492.8252
  - Bevorzugte Kontaktmöglichkeit: E-Mail
- Addresses:** [empty]
- Vollmachtgeber:** 1
- Ausleihen:**
  - 4 Aktuelle Ausleihen
  - 4 Ausleihhistorie
- Benutzerberechtigungen:** 0

# FOLIO software - finances





# FOLIO team in VZG and hbz

- Active cooperation in FOLIO project
  - Functional experts and developers
    - FOLIO Product Council, Stakeholders Board, SIGs, subgroups (incl. convener)
- Active cooperation in OLE community
  - Board, Steering Committee
- Joint representation of network interests
  - Workshops, presentations, documentations
  - Development project → electronic resource management
    - Organization of German FOLIO community
    - German web side „<https://www.folio-bib.org/>“
- Continuous evaluation of software and requirements during development process



# FOLIO opportunities and risks

- Systems concept: modular, flexible, and customizable
- Integration in higher education structures
- Possibility of „step by step“ implementation of single modules  
= less fractions, less risk
- Systems architecture strictly open api's
  - Platform internal between the apps
  - External to 3rd party systems
- Enhanceable by localization and extra services, e. g. 3rd party services, local developed apps (self check app, open access app, ...)



# FOLIO opportunities and risks

- Connection of various data sources
  - Standard metadata sources, e. g. union catalogues
  - Knowledge bases: commercial, cooperative
  - Linked open data
- Integration of future requirements
- Modern software stack
  - Recent technologies
  - Freedom of choice
  - Positive evaluation through OLE community – technical review team





# FOLIO opportunities and risks

- Open Source
  - Open api's: quick, non proprietary addons possible
  - No vendor lock-in
  - Cooperative, transparent participation and developement – community owned
  - „Save haven“ of code (Apache 2.0 license) under the Open Library Foundation
- Data security, data safety, data ownership
- Self determination in information supply
  - Public service hosting possible
  - Library networks - proven, strong, collaborative partners in international cooperation



# FOLIO opportunities and risks

- Cooperative development
  - „from libraries for libraries“
    - Comprehensive functional knowledge
    - Knowledge about recent and future requirements
    - Responsibility for development
  - In cooperation with commercial partners
    - Financial and management support
    - „Outcome oriented“ target settings ensure the necessary pressure for success and reliability



# FOLIO opportunities and risks

- Achievement of an implementable version
  - Definition and prioritization of requirements and realization
  - Reliable and timely delivery of
    - Funding
    - Staff: developer and functional experts
    - Product owner, project manager / leadership
    - Planned software in scope and quality
  - Consideration and realization of increased efforts in coordination and communication
  - Security for sustainable development continuation



# FOLIO opportunities and risks

- The platform in focus!
    - Isolated module migration possible
    - Open api architecture (internal and external)
    - Recent software stack
    - Microservice idea embedded in technology concept
    - Compatibility of public service and commercial interests
- = sustainable development possibilities of functionality and services for libraries in an innovative, self contained, consolidated concept!



# FOLIO implementation

- FOLIO partner libraries as „early adopters“ in 2019
  - Texas A+M, Chicago, Lehigh, Chalmers, ...
  - Data migration concepts
  - OLE partner libraries will support each other
- Choice of business model
  - Local
  - Hosted / SaaS by public service providers, e.g. network headquarters or regional centers of excellence
  - Commercial SaaS, e.g. by EBSCO, Index Data, ...



# FOLIO learn more

- Code on GitHub  
<https://github.com/folio-org>
- UI prototype  
<http://ux.folio.org/>
- Demo installation  
<https://folio-demo.gbv.de/> + <http://folio-dev.hbz-nrw.de>  
(diku\_admin / admin)



# FOLIO learn more

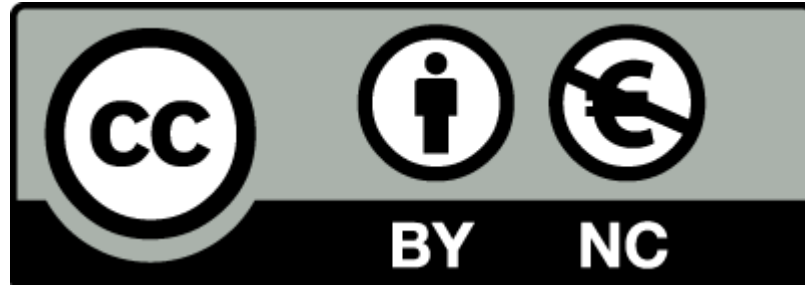
- FOLIO Wiki  
<https://wiki.folio.org/>
- OLE community  
<https://www.openlibraryenvironment.org/>
- Open Library Foundation  
<http://www.openlibraryfoundation.org/>
- FOLIO  
<https://www.folio.org/>



## Questions?

Kirstin Kemner-Heek  
[kirstin.kemner@gbv.de](mailto:kirstin.kemner@gbv.de)





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