



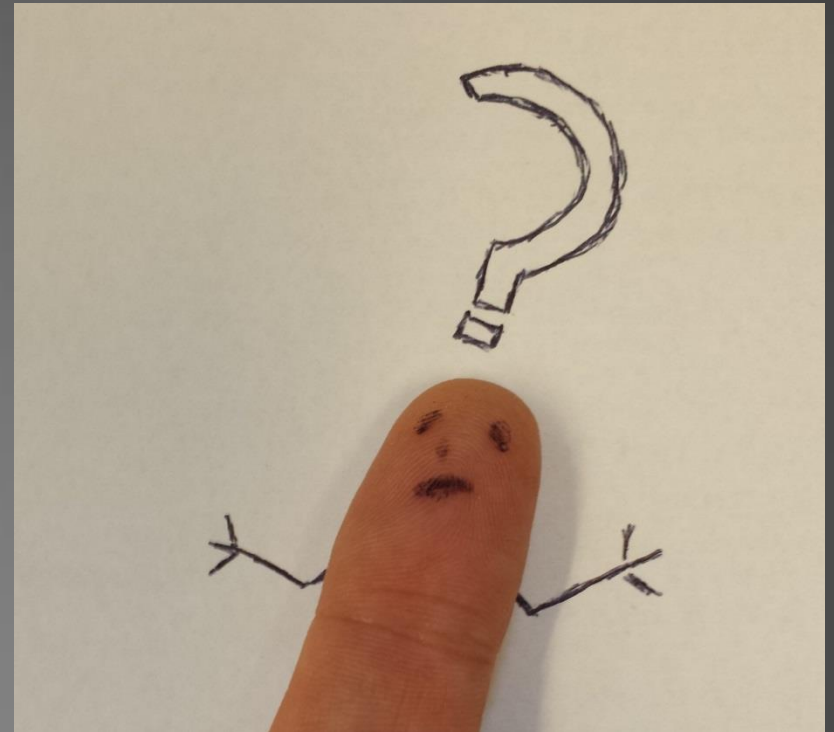
AN UPDATE ON KUALI OLE

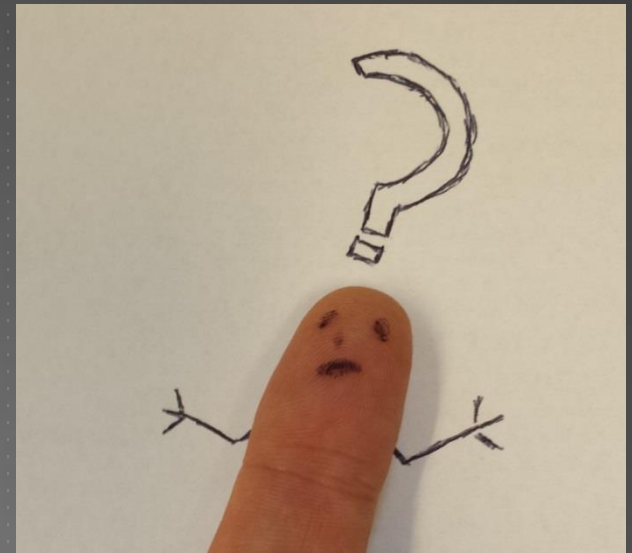
Bibliothekartag 2014 – Bremen

Michael Winkler – University of Pennsylvania

QUESTIONS ABOUT KUALI OLE (KOLE)

- ▶ What is Kuali OLE?
- ▶ What does Kuali OLE do and when?
- ▶ What is next for KOLE?
- ▶ How do I get involved with KOLE?





SO, WHAT IS KUALI OLE?

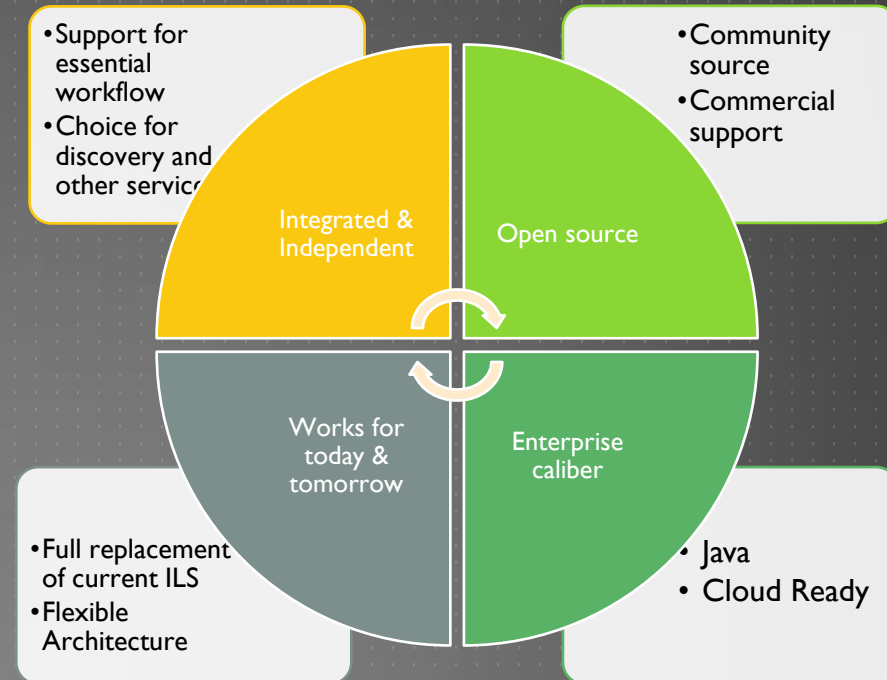
KUALI OLE IS A COMMUNITY

- ▶ A community within a community
 - ▶ Part of the Kuali Foundation – Building software and community for Higher Education
 - ▶ 77 Members, 8 Projects, 12 Commercial Affiliates
 - ▶ Nearly 1000 people involved
 - ▶ A legal entity and a philosophy
- ▶ Kuali OLE Partners
 - ▶ Software designed by Librarians for Libraries to serve users
 - ▶ 10 institutions, 5 KCAs & affiliates, GOKb
 - ▶ 50+FTE including architects, coders, designers, SMEs, testers, and documenters
 - ▶ Funded by the Partners and the Andrew W Mellon Foundation



KUALI OLE IS A SOLUTION

- ▶ For developing and managing a next generation, library services platform
- ▶ KOLE is building to meet the following requirements:
 - ▶ Flexibility in design
 - ▶ Community ownership with an open source license and strong vendor support
 - ▶ Modular Service-Oriented Architecture
 - ▶ Enterprise-level integration
 - ▶ Meet current and future business needs
 - ▶ Sustainable design enabling the evolution of software, hardware, and mission



KUALI OLE IS SOFTWARE

- ▶ Enterprise Java with services middleware
- ▶ Built to integrate & interoperate
- ▶ A platform for development
- ▶ Designed for libraries by librarians!
- ▶ Web services APIs

```
import org.apache.commons.lang3.StringUtils;
import org.kuali.ole.core.service.framework.parameter.ParameterService;

/**
 */
public class LoadDefaultWorkflowsBean {
    private static final org.apache.log4j.Logger LOG = org.apache.log4j.Logger.getLogger(LoadDefaultWorkflowsBean.class);
    protected static final String LOAD_DEFAULT_WORKFLOW_IND = "LOAD_DEFAULT_WORKFLOW_IND";
    protected ParameterService parameterService;
    protected WorkflowFileHandler workflowFileHandler;

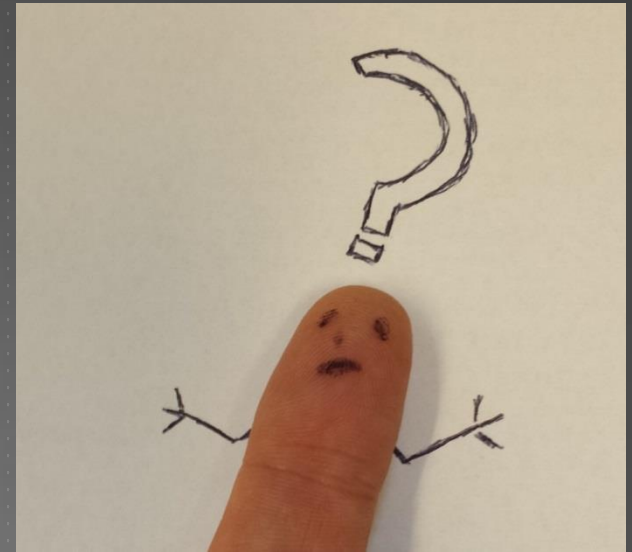
    public void unpackWorkflows( boolean forceLoad ) {
        if ( forceLoad || parameterService.getParameterValueAsBoolean(OLEConstants.OLE_NMSPC, OLEConstants.OLE_CMPNT, LOAD_I
            _WORKFLOW_IND, Boolean.TRUE) ) {

            LOG.info("Starting Load of Default Workflows");
            workflowFileHandler.execute();
            LOG.info("Completed Load of Default Workflows");

            Parameter existingParameter = parameterService.getParameter(OLEConstants.OLE_NMSPC, OLEConstants.OLE_CMPNT, LOAD
            LT_WORKFLOW_IND);
            if ( existingParameter != null ) {
                Parameter.Builder updatedParameter = Parameter.Builder.create(existingParameter);
                updatedParameter.setValue("N");
                parameterService.updateParameter(updatedParameter.build());
            } else {
                Parameter.Builder newParameter = Parameter.Builder.create(OLEConstants.APPL_ID, OLEConstants.OLE_NMSPC, OLECo
                s.OLE_CMPNT, LOAD_DEFAULT_WORKFLOW_IND, ParameterType.Builder.create("CONFIG"));
                newParameter.setDescription( "Set to 'Y' to have the application ingest the default circulation policies upon
                tartup." );
                newParameter.setValue("N");
                parameterService.createParameter(newParameter.build());
            }
        }
    }

    public void setWorkflowFileHandler(WorkflowFileHandler workflowFileHandler) {
        this.workflowFileHandler = workflowFileHandler;
    }

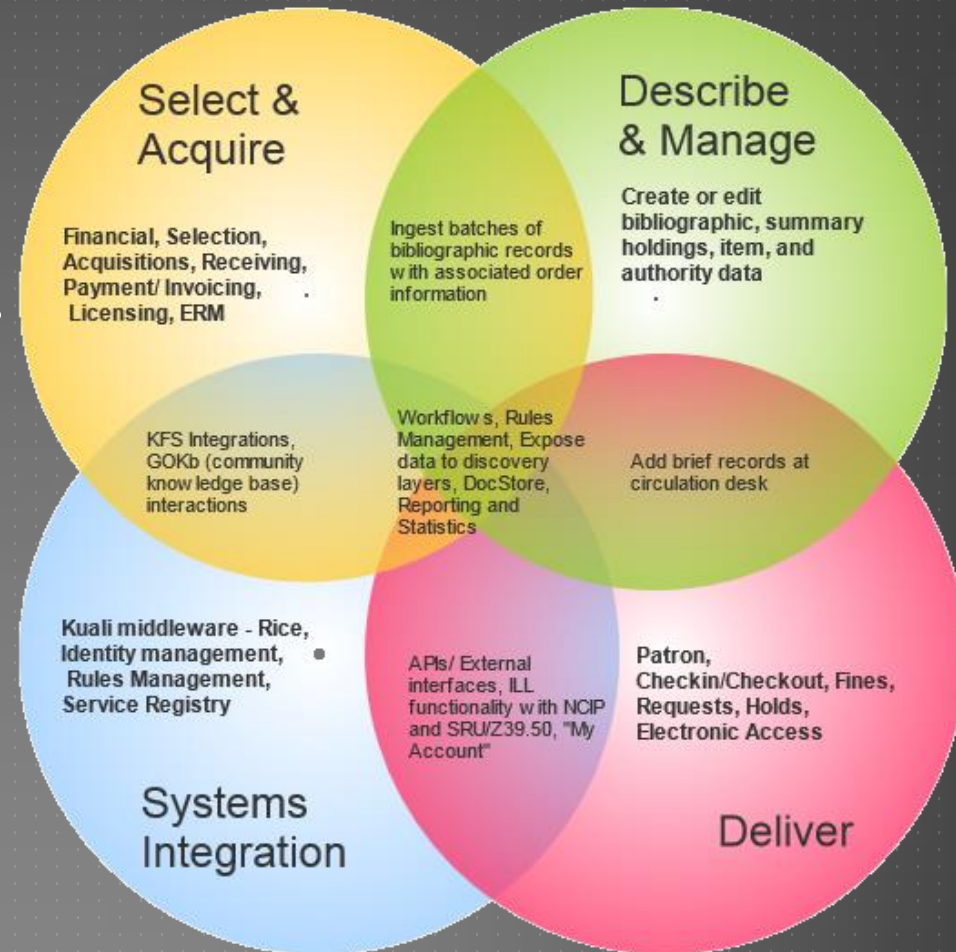
    public void setParameterService(ParameterService parameterService) {
        this.parameterService = parameterService;
    }
}
```



WHAT DOES KUALI OLE DO &
WHEN WILL IT DO THAT?

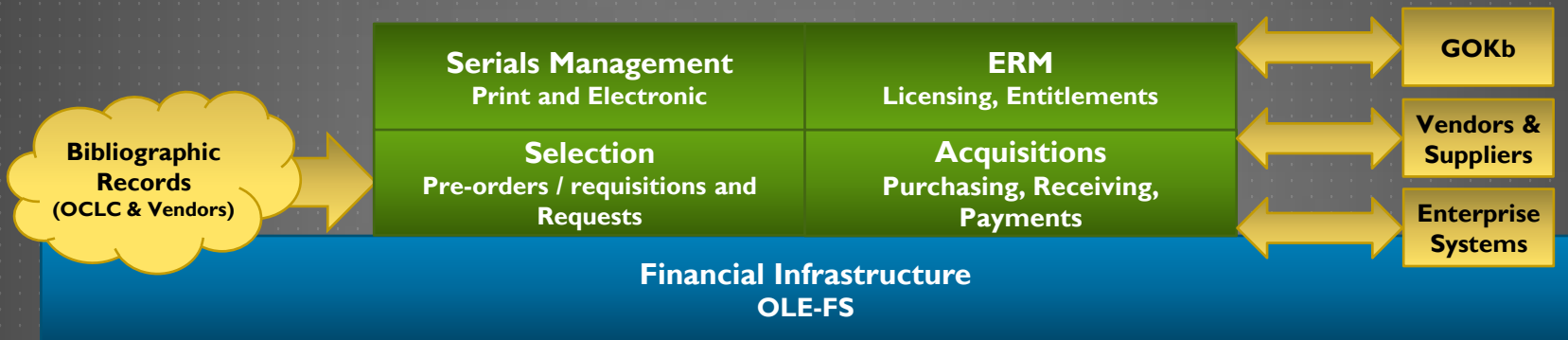
KOLE FUNCTIONAL ARCHITECTURE

- ▶ Four functional modules
- ▶ Overlapping functionality
- ▶ Iterative and maturing capabilities
- ▶ Open architecture and code
- ▶ Built on Quali enterprise architecture



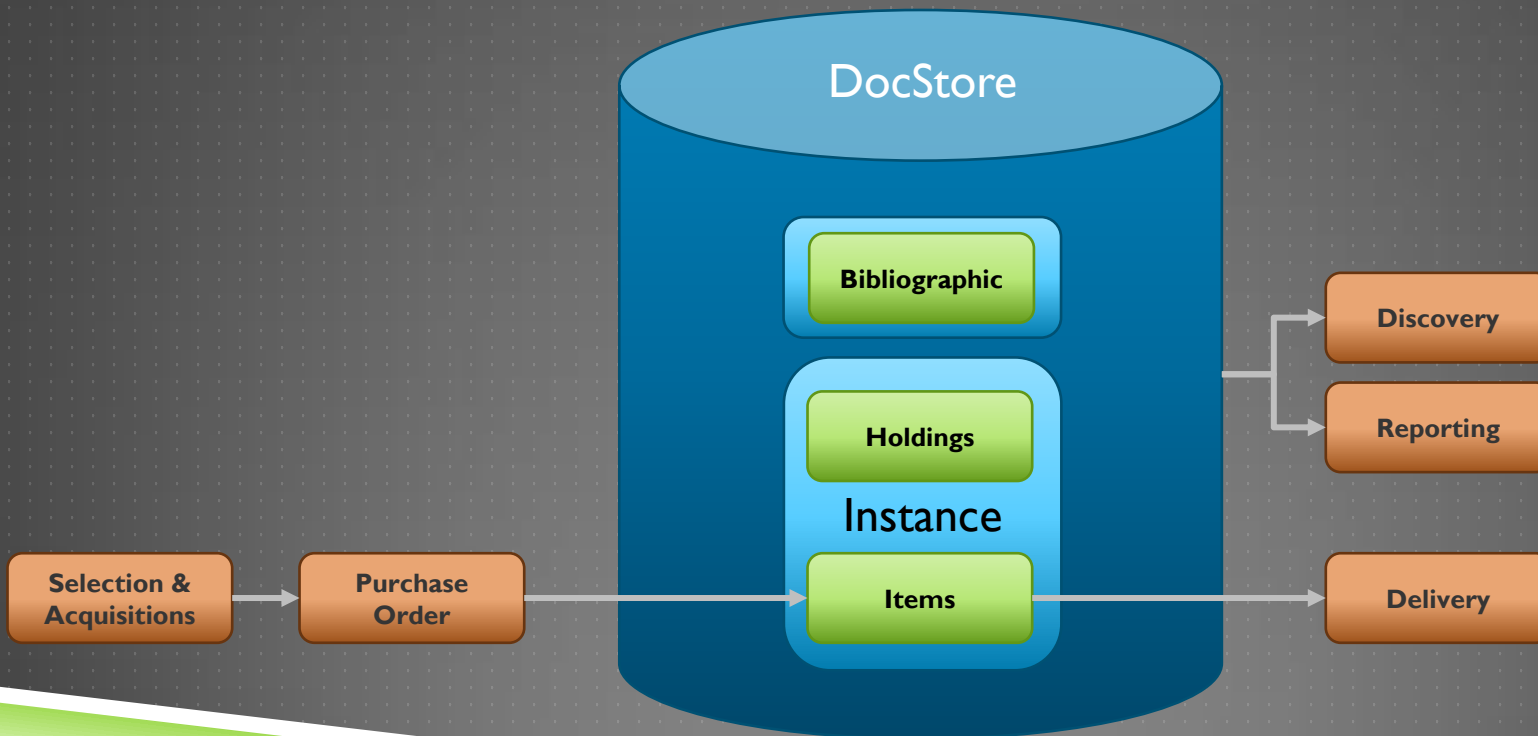
FUNCTIONAL ARCHITECTURE – SELECT & ACQUIRE

- ▶ Select & Acquire – <http://www.kuali.org/ole/modules/select-acquire-entity>



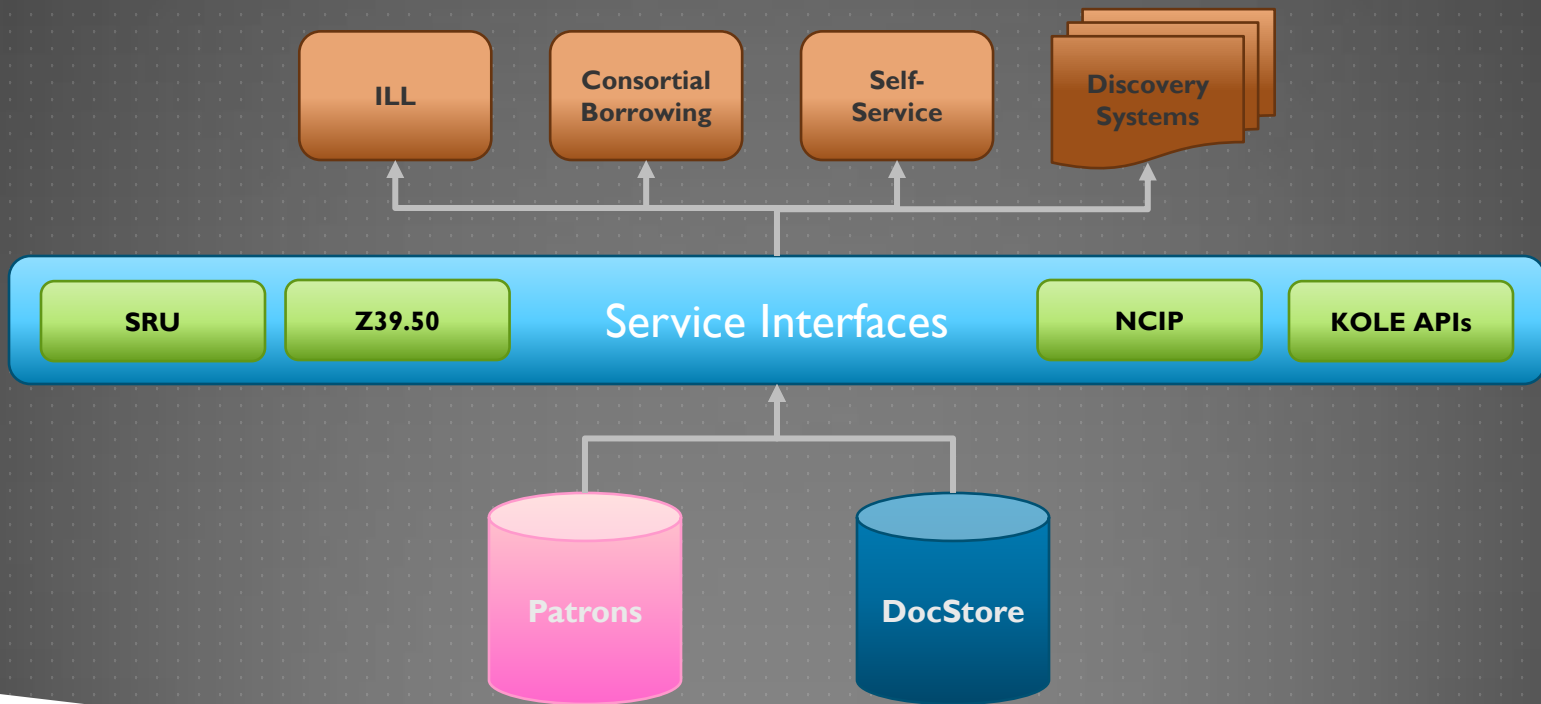
FUNCTIONAL ARCHITECTURE – DESCRIBE

- ▶ Describe – <http://www.kuali.org/ole/modules/describe-manage-entity>



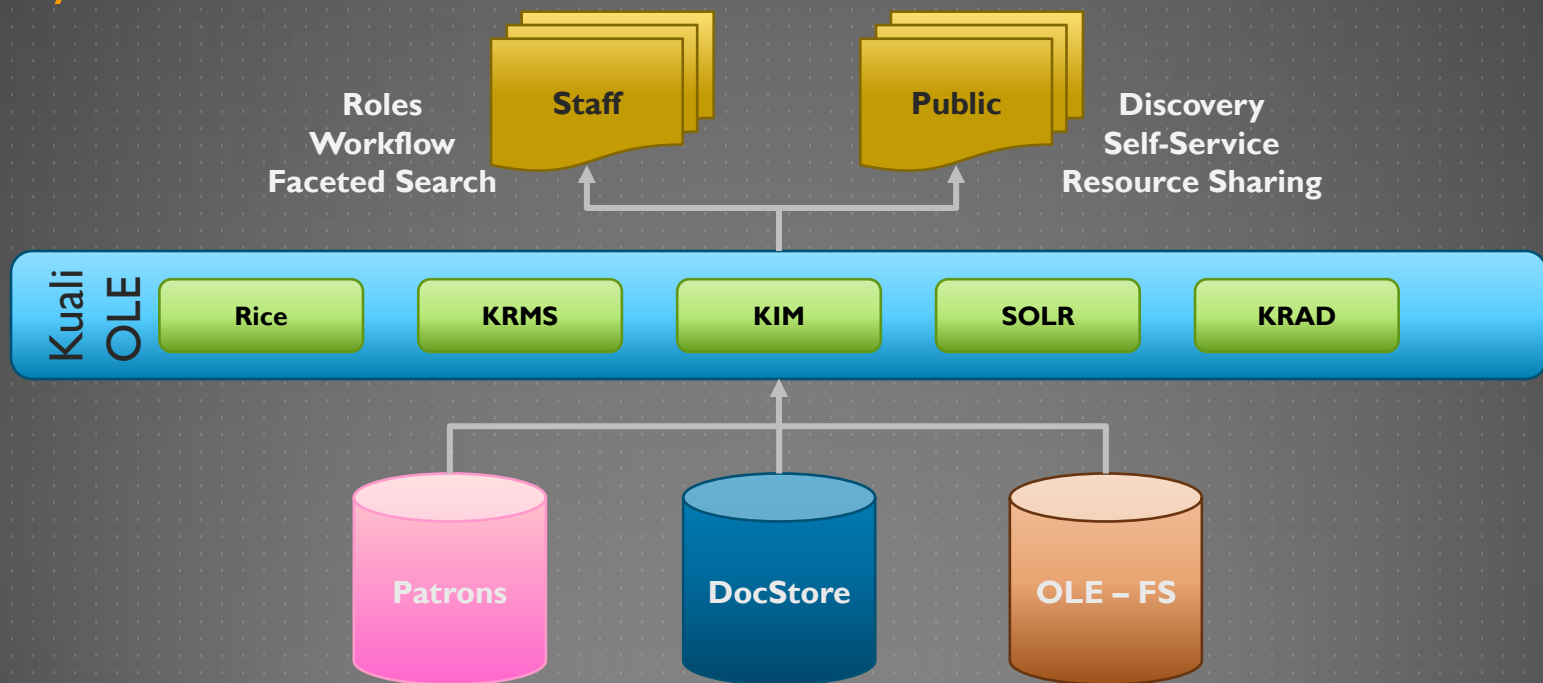
FUNCTIONAL ARCHITECTURE – DELIVERY

- ▶ Deliver – <http://www.kuali.org/ole/modules/deliver-entity>



FUNCTIONAL ARCHITECTURE – SYSTEMS INTEGRATION

- Systems Integration – <http://www.kuali.org/ole/modules/systems-integration-entity>



RELEASE 1.5 SCOPE

- ▶ Completed by the Functional Council at Kuala Days 2013
- ▶ Focus is on the Early Adopter Release
- ▶ Packaged and released for 2-July
- ▶ Select and Acquire
 - ▶ E-Resource renew, copy, cancel, and link to other documents
 - ▶ Serial renewals
 - ▶ Budget snapshots
- ▶ Describe and Manage
 - ▶ Cloning existing records
 - ▶ Global changes to OLE Instances (Item & Holding records)
 - ▶ Cataloging analytics
 - ▶ Clickable URLs

OLE Release 1.5							April 17, 2014
Jira No.	Jira Summary		Orig Dev Estimate	1.5 Dev Hrs	Dev Hrs Remain	Dev Hrs Used	Comments on Status
Total Hours for OLE Release 1.0			7102	11810	0	11810	
Milestone 1			2130	7156	0	7156	
OLE-4010	Docstore - Sys	SII	672	1912	0	1912	CLOSED
OLE-4323	MySQL 5.6.12 - Developer Local	SII	140	119	0	119	CLOSED
OLE-4540	UI Portal Updates	xModule	28	54	0	54	CLOSED
OLE-4630	Rice 2.3.2 Upgrade - KRAD	SII	290	734	0	734	CLOSED
OLE-5271	Docstore - Data Model Refactor	SII	120	67	0	67	CLOSED
OLE-5391	POM Upgrade - Current Kuala	CM			Peri - Complete		CLOSED
OLE-5602	Schema Unification (Single	SII			Peri - Complete		CLOSED
Various	15% Time for 1.0 bug fixes	CM	890	4270	0	4270	CLOSED
Milestone 2			3000	2794	0	2794	
OLE-2655	Claim Unfulfilled Orders	S&A	392	186	0	186	CLOSED
OLE-2688	Automated Retrieval System API	SII	490	193	0	193	CLOSED
OLE-2677	Clickable URL in Bib & Holding	Describe	56	28	0	28	CLOSED
OLE-2750	Print pull call slips for retrieval	Deliver	28	28	0	28	CLOSED
OLE-2768	Donor Code in PO	S&A	80	303	0	303	CLOSED
OLE-2948	Bib-Instance Change for PURAP	S&A	364	452	0	452	CLOSED
OLE-3794	Fund, Currency and Payment	S&A	560	382	0	382	CLOSED
OLE-4139	Missing Pieces, Damage, Claims	Deliver	56	178	0	178	CLOSED
OLE-4242	Bib Editor Enhancements	Describe	504	182	0	182	CLOSED
OLE-4245	Invoicing Enhancements 1.5 -	S&A	308	380	0	380	CLOSED
OLE-4260	Operator Warning at Checkout -	Deliver	28	18	0	18	CLOSED
OLE-4467	Need ability to determine which	Deliver	28	0	0	0	CLOSED
OLE-4470	Printing of routing and hold slips	Deliver	56	53	0	53	QA Review
OLE-4901	Deliver Permissions	Deliver	60	28	0	28	CLOSED
OLE-5067	Bulk Load Testing - Chicago	SII	0	291	0	291	CLOSED
OLE-5392	Tomcat 7 Upgrade	CM		14	0	14	CLOSED
OLE-5411	Bread Crumbs	xModule		64	0	64	CLOSED
OLE-5691	Docstore Schema Naming	SII		14	0	14	CLOSED
Milestone 3			1808	1506	0	1506	
OLE-2686	Global changes to Instance	Describe	224	278	0	278	CLOSED
OLE-3267	Item Attached to Multiple	Describe	168	203	0	203	CLOSED
OLE-3774	Block Renewal	Deliver	28	21	0	21	CLOSED
OLE-3818	Allow Staff Operator to Edit Hold	Deliver	28	0	0	0	CLOSED
OLE-4160	Modification to the workflow for	Deliver	56	7	0	7	Deferred to future release
OLE-4287	Docstore Search - Framework	xModule	672	203	0	203	CLOSED
OLE-4474	Import Profile 9xx Data for Orders	xModule	160	299	0	299	CLOSED
OLE-4657	Circulation and My Account API	SII	120	47	0	47	Deferred Testing to future release
OLE-5111	Docstore - eResource Data Model	SII	240	91	0	91	CLOSED
OLE-5235	Import Multiple Instance for Bib	SII	112	77	0	77	CLOSED
OLE-5389	Licensing to RDBMS - Abandon	SII		112	0	112	CLOSED
OLE-5511	Standardize Headers	xModule		42	0	42	CLOSED
OLE-5642	Loaders for Serials	SII		126	0	126	QA Review
Configuration Management & Other			164	354	0	354	
OLE-4377	Bootstrap vs. Demo Data Set	CM			Configuration Management		CLOSED
OLE-5760	Retain Test Data at Deploy	CM			Configuration Management		CLOSED
OLE-4413	Test Drive Data Refresh Job	CM			Configuration Management		CLOSED
OLE-4629	Patron Code Base Clean Up	Deliver	84	172	0	172	PM/DM to Review
OLE-5313	Roles & Permissions	SII	80	182	0	182	PM/DM to Review
OLE-5692	Dev Environment Latency	CM			Configuration Management		PM/DM to Review
OLE-4300	Reinstate Unit Test Framework	CM			Configuration Management		PM/DM to Review
Release Packaging							
	Technical Documentation						
	Licensing Audit						
	Packaging						
Available Hours Remaining				0			
Estimated Hrs of Work to Complete				0			
Balance of Hours (Deficit)				0			

RELEASE 1.5 SCOPE

▶ Deliver

- ▶ Circulation standards: SIP/SIP2/RFID
- ▶ Enhance patron and item checkout notes
- ▶ Circulation calendar
- ▶ Enhancements on account blocks and requests

▶ System Integration

- ▶ User interface improvements
- ▶ Search framework across modules
- ▶ Compatibility with storage facility retrieval system

▶ Implementation Tools

- ▶ Reporting tools
- ▶ Distribution packaging
- ▶ Framework for training development

OLE Release 1.5							April 17, 2014
Jira No.	Jira Summary		Orig Dev Estimate	1.5 Dev Hrs	Dev Hrs Remain	Dev Hrs Used	Comments on Status
Total Hours for OLE Release 1.0			7102	11810	0	11810	
Milestone 1			2130	7156	0	7156	
OLE-4010	Docstore - Sys	SII	672	1912	0	1912	CLOSED
OLE-4323	MySQL 5.6.12 - Developer Local	SII	140	119	0	119	CLOSED
OLE-4540	UI Portal Updates	xModule	28	54	0	54	CLOSED
OLE-4630	Rice 2.3.2 Upgrade - KRAD	SII	290	734	0	734	CLOSED
OLE-5271	Docstore - Data Model Refactor	SII	120	67	0	67	CLOSED
OLE-5391	POM Upgrade - Current Kual	CM			Peri - Complete		CLOSED
OLE-5602	Schema Unification (Single	SII			Peri - Complete		CLOSED
Various	15% Time for 1.0 bug fixes	CM	890	4270	0	4270	CLOSED
Milestone 2			3000	2794	0	2794	
OLE-2655	Claim Unfulfilled Orders	S&A	392	186	0	186	CLOSED
OLE-2688	Automated Retrieval System API	SII	490	193	0	193	CLOSED
OLE-2677	Clickable URL in Bib & Holding	Describe	56	28	0	28	CLOSED
OLE-2750	Print pull call slips for retrieval	Deliver	28	28	0	28	CLOSED
OLE-2768	Donor Code in PO	S&A	80	303	0	303	CLOSED
OLE-2948	Bib-Instance Change for PURAP	S&A	364	452	0	452	CLOSED
OLE-3794	Fund, Currency and Payment	S&A	560	382	0	382	CLOSED
OLE-4139	Missing Pieces, Damage, Claims	Deliver	56	178	0	178	CLOSED
OLE-4242	Bib Editor Enhancements	Describe	504	182	0	182	CLOSED
OLE-4245	Invoicing Enhancements 1.5 -	S&A	308	380	0	380	CLOSED
OLE-4260	Operator Warning at Checkout -	Deliver	28	18	0	18	CLOSED
OLE-4467	Need ability to determine which	Deliver	28	0	0	0	CLOSED
OLE-4470	Printing of routing and hold slips	Deliver	56	53	0	53	QA Review
OLE-4901	Deliver Permissions	Deliver	60	28	0	28	CLOSED
OLE-5067	Bulk Load Testing - Chicago	SII	0	291	0	291	CLOSED
OLE-5392	Tomcat 7 Upgrade	CM		14	0	14	CLOSED
OLE-5411	Bread Crumbs	xModule		64	0	64	CLOSED
OLE-5691	Docstore Schema Naming	SII		14	0	14	CLOSED
Milestone 3			1808	1506	0	1506	
OLE-2686	Global changes to Instance	Describe	224	278	0	278	CLOSED
OLE-3267	Item Attached to Multiple	Describe	168	203	0	203	CLOSED
OLE-3774	Block Renewal	Deliver	28	21	0	21	CLOSED
OLE-3818	Allow Staff Operator to Edit Hold	Deliver	28	0	0	0	CLOSED
OLE-4160	Modification to the workflow for	Deliver	56	7	0	7	Deferred to future release
OLE-4287	Docstore Search - Framework	xModule	672	203	0	203	CLOSED
OLE-4474	Import Profile 9xx Data for Orders	xModule	160	299	0	299	CLOSED
OLE-4657	Circulation and My Account API	SII	120	47	0	47	Deferred Testing to future release
OLE-5111	Docstore - eResource Data Model	SII	240	91	0	91	CLOSED
OLE-5235	Import Multiple Instance for Bib	SII	112	77	0	77	CLOSED
OLE-5389	Licensing to RDBMS - Abandon	SII		112	0	112	CLOSED
OLE-5511	Standardize Headers	xModule		42	0	42	CLOSED
OLE-5642	Loaders for Serials	SII		126	0	126	QA Review
Configuration Management & Other			164	354	0	354	
OLE-4377	Bootstrap vs. Demo Data Set	CM			Configuration Management		CLOSED
OLE-5760	Retain Test Data at Deploy	CM			Configuration Management		CLOSED
OLE-4413	Test Drive Data Refresh Job	CM			Configuration Management		CLOSED
OLE-4629	Patron Code Base Clean Up	Deliver	84	172	0	172	PM/DM to Review
OLE-5313	Roles & Permissions	SII	80	182	0	182	PM/DM to Review
OLE-5692	Dev Environment Latency	CM			Configuration Management		PM/DM to Review
OLE-4300	Reinstate Unit Test Framework	CM			Configuration Management		PM/DM to Review
Release Packaging							
	Technical Documentation						
	Licensing Audit						
	Packaging						
Available Hours Remaining				0			
Estimated Hrs of Work to Complete				0			
Balance of Hours (Deficit)				0			

RELEASE 2.0 SCOPE

- ▶ Completed by Functional Council at KCW 2014
- ▶ Focus on General Release
- ▶ Package and release for 1st Quarter 2015
- ▶ Select and Acquire
 - ▶ Electronic resources management
 - ▶ Track platforms, subscriptions, and vendors/organizations
 - ▶ Initial GOKb integration
 - ▶ Triggers/alerts for future actions
 - ▶ Fiscal year rollover
- ▶ System Integration
 - ▶ Implementation loaders
 - ▶ Middleware upgrades
- ▶ Implementation Documentation!!!



KOLE IMPLEMENTATION PROCEDURES

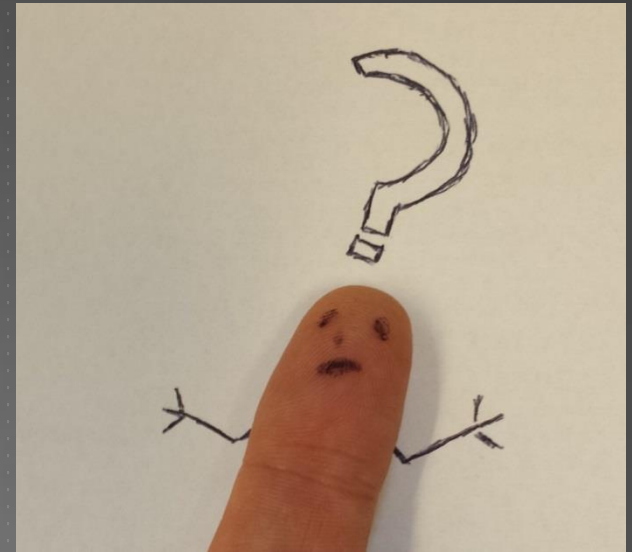
- ▶ Start up KOLE instance
 - ▶ Define deployment option
 - ▶ Analyze institutional data required to populate
 - ▶ Create and bootstrap local instance of OLE
- ▶ Select & Acquire Data
 - ▶ Prepare Chart of Accounts
 - ▶ Populate vendor file
 - ▶ Load continuations and open orders
 - ▶ Load serials holdings
- ▶ Describe Data
 - ▶ Extract and map Bibliographic & Instance DocStore Data
 - ▶ Load DocStore data using loader templates

```
<?xml version="1.0"?>
<agendas>
  <agenda> <!--General Checks: rules to validate Patron (generalBlock,
expiration date, address, barcode, and, if proxy, a rule for proxy expiration date
check-->
    <name>General Checks</name>
    <rules>
      <rule> <!--GeneralBlock: if generalBlock=true then display error
message-->
        <name>isGeneralBlock</name>
        <oleProposition> <!--if generalBlock=true-->
          <type>simple</type>
          <simpleProposition>
            <term>
              <type>java.lang.String</type>
              <value>generalBlock</value>
            </term>
            <operator>=</operator>
            <values>
              <value>
                <type>java.lang.String</type>
                <name>true</name>
              </value>
            </values>
          </simpleProposition>
        </oleProposition>
        <trueActions> <!--then display error message-->
          <action>
            <name>errorAction</name>
            <parameter>
              <name>errorMessage</name>
              <value>This patron has a general block</value>
            </parameter>
          </action>
        </trueActions>
      </rule>
      <rule> <!--PatronMembershipExpirationDate: if patron expiration date
```


KOLE IMPLEMENTATION PROCEDURES

- ▶ Deliver Data
 - ▶ Extract & map patron and circulation history data
 - ▶ Load Circulation history data
 - ▶ Create circulation policies
 - ▶ Input and test Deliver parameters
- ▶ Systems Integration
 - ▶ Integrate with Identity Management System
 - ▶ Determine Roles & Permissions
 - ▶ Select and implement discovery layer of choice
- ▶ Set up services reporting

```
<?xml version="1.0"?>
<agendas>
  <agenda> <!--General Checks: rules to validate Patron (generalBlock,
expiration date, address, barcode, and, if proxy, a rule for proxy expiration date
check-->
    <name>General Checks</name>
    <rules>
      <rule> <!--GeneralBlock: if generalBlock=true then display error
message-->
        <name>isGeneralBlock</name>
        <oleProposition> <!--if generalBlock=true-->
          <type>simple</type>
          <simpleProposition>
            <term>
              <type>java.lang.String</type>
              <value>generalBlock</value>
            </term>
            <operator>=</operator>
            <values>
              <value>
                <type>java.lang.String</type>
                <name>true</name>
              </value>
            </values>
          </simpleProposition>
        </oleProposition>
        <trueActions> <!--then display error message-->
          <action>
            <name>errorAction</name>
            <parameter>
              <name>errorMessage</name>
              <value>This patron has a general block</value>
            </parameter>
          </action>
        </trueActions>
      </rule>
      <rule> <!--PatronMembershipExpirationDate: if patron expiration date
```



WHAT IS NEXT FOR KOLE?

DEVELOPMENT DIRECTIONS

- ▶ Consortial & federated support
 - ▶ Record ownership
 - ▶ Multiple charts of account
 - ▶ Work units
- ▶ Distribute training & demonstration database
- ▶ Full ERM functions & GOKb bidirectional integration
- ▶ Code contribution governance & management
- ▶ [Documentation portal](#)
- ▶ Cloud implementations



KOLE OPTIONS – DEPLOYMENT



OLE Hosted Option

- Using a KCA, institutions will opt for a contract that supports complete implementation - analysis, installation, migration, configuration, maintenance & support of Kuali OLE



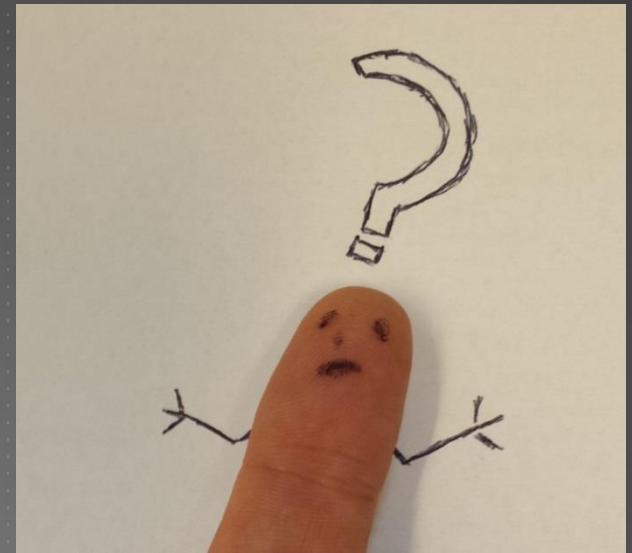
OLE Local Option

- Using local resources an institution will implement Kuali OLE on local or private cloud infrastructure and relies on the Kuali OLE community and/or KCAs for support & enhancement



OLE Hybrid Option

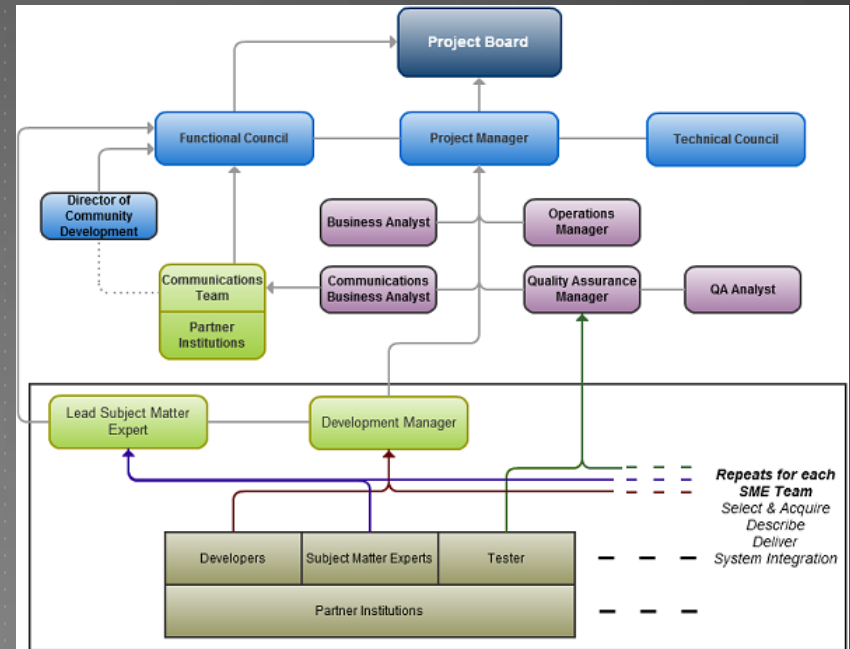
- Select your competencies for local migration and implementation and out-source critical areas of deployment or migration, to leverage your resources and manage costs using commodity priced cloud infrastructure

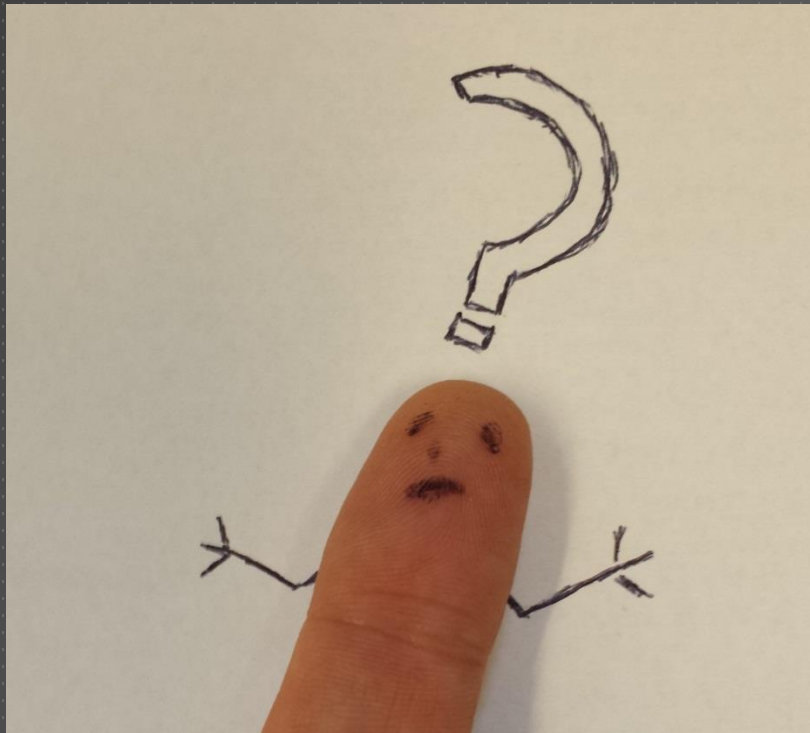


HOW DO I GET INVOLVED WITH
KOLE?

WAYS TO PARTICIPATE

- ▶ Join the KOLE Community!
 - ▶ Determine your future
 - ▶ Invest within your community
- ▶ Be an adopter!
 - ▶ Gain benefits of community source
 - ▶ Provide value and feedback
- ▶ Be a Subject Matter Expert!
 - ▶ Define use cases
 - ▶ Write specifications
- ▶ Be a developer!
 - ▶ Sustain the software
 - ▶ Create new capabilities





QUESTIONS?

Follow us!

- Web: <http://ole.kuali.org>
- Twitter: [@kualiole](https://twitter.com/kualiole)
- Blog: <http://kualiole.tumblr.com>
- Me: winkler4@upenn.edu