



USING THE ADMISSIONS APPLICATION WEB SERVICES FRAMEWORK TO DEVELOP AN APPLICATION SERVICE

SESSION 5032
November 6, 2017

PRESENTERS

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WESTERN UNIVERSITY

Founded: 1878

Graduate students: ~5,500

Graduate programs: 91



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WESTERN & ORACLE

Campus Solutions 9.0
Bundle 26
PeopleTools 8.54.21

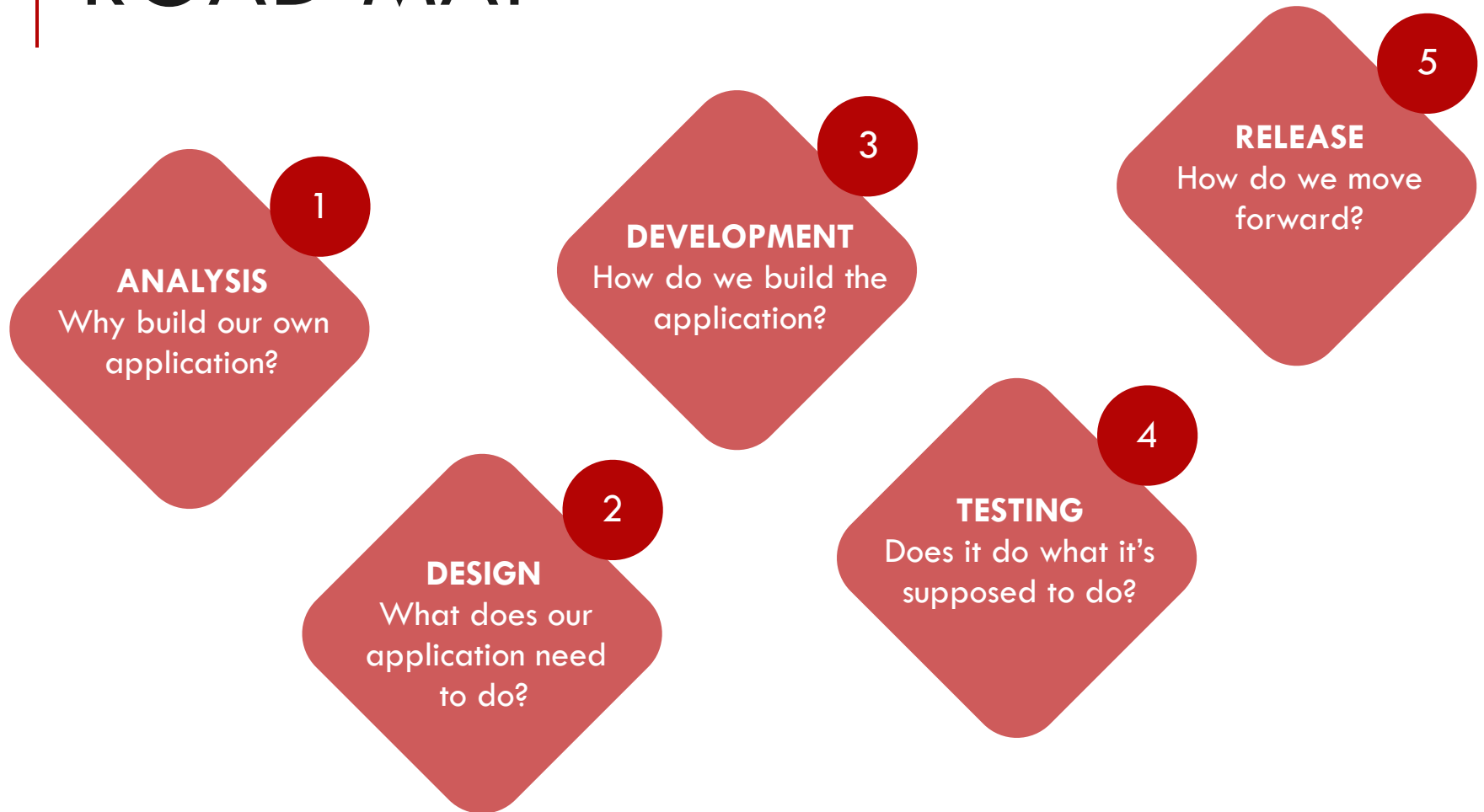
CANADA ALLIANCE 5-7 NOVEMBER 2017

GOALS FOR SESSION

We hope to...

1. Help you understand what is delivered within the Admission Applications Web Services
2. Demonstrate how Western leveraged the technology to create a self-sufficient application network
3. Provide you insight into our project and the lessons we learned and continue to learn

ROAD MAP





ANALYSIS

Why Build Our Own
Application?

ANALYSIS



BRIEF HISTORY – ADMISSIONS

- Relied on digital third-party service since 2002
- Services pushed finished applications to SGPS
- Services took fee per application
- SGPS built services to accommodate third-party

ANALYSIS



WHY CONSIDER OUR OWN APPLICATION SERVICE?

PROS

- Improved access to information
- Improved access to applicants
- Improved business models
- No more revenue loss

CONS

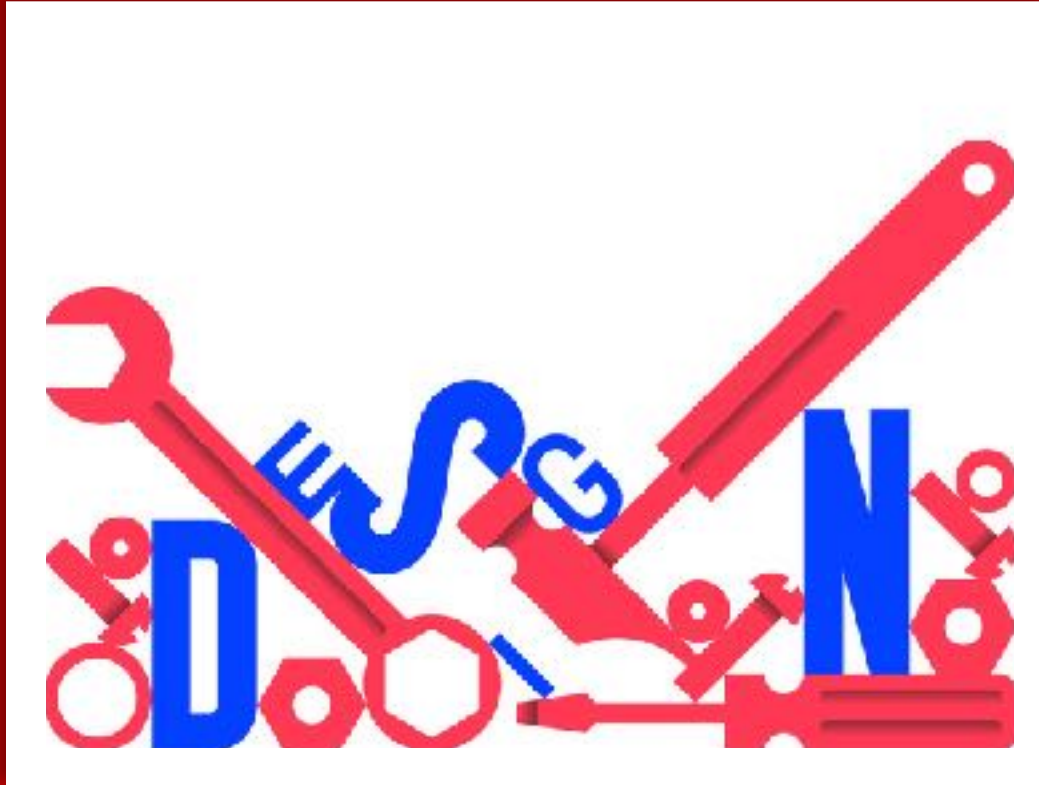
- Responsibility

ANALYSIS



OPPORTUNITY

- Western was considering installing Campus Solution update bundles 24-27, holding the AAWS infrastructure
- Administration saw opportunity to modernize application service and eliminate third-party involvement



Drafting of Project Scope (11 months)

Start April 1,
2011

End March 1,
2012



Project Approval (6 months)

Start March 1,
2012

End
September 9,
2012

DESIGN

- What is the optimal business model for graduate admissions at Western?
- What can Campus Solutions and AAWS do to achieve this model?

DESIGN

CONSULTATION

- SGPS began the active engagement of the graduate community
 - Associate Deans
 - Administrative Staff
 - SGPS Staff
 - Students
- Ignore what's been done in the past
- What would you want in an admissions process?

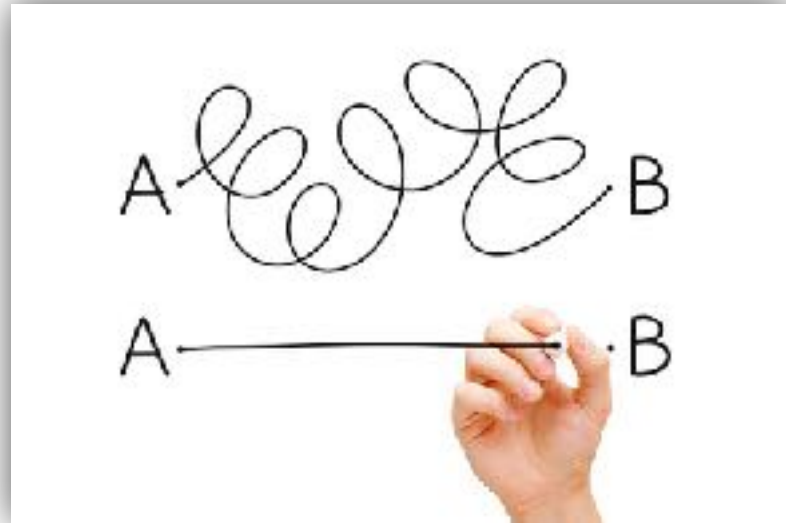


DESIGN

RESULTS

Stakeholders wanted an application service that was:

- **Fast**
- Transparent
- Customizable
- Comprehensive



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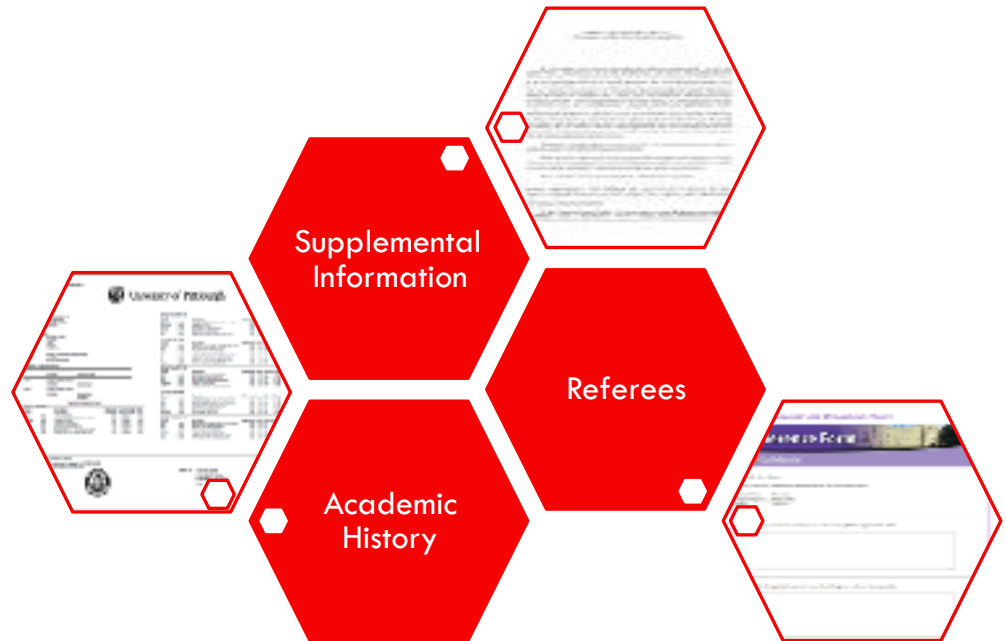


DESIGN

RESULTS

Stakeholders wanted an application service that was:

- Fast
- Transparent
- Customizable
- **Comprehensive**



DESIGN

INVESTIGATION

- SGPS sought guidance regarding the AAWS software
- Attended AAWS sessions at Alliance
- Attended pre-conference workshop on AAWS
- Connected with schools who had already deployed an AAWS solution

ALLIANCE



ORACLE®

WHAT IS AAWS?

From PeopleBooks:

The primary purpose of the Admission Application Web Services (AAWS) suite (introduced in July, 2010) is to provide academic institutions, across the globe, with the ability to capture and move data from separately designed and constructed admissions applications into staging and production tables.

From Us:

Admission Applications Web Services (AAWS) is the Oracle delivered engine that you can build your own admissions platform around.

WHAT IS AAWS?

2 Services for Payment Processing

- Initiate Payment
- Complete Electronic Payment

6 Services for Application Processing

- Create Application
- Save Application
- Get Applications
- Get Application
- Get Attachment
- Submit Application



2 Services for User Registration

- User Registration
- User Authentication

1 Service for Calling Lists

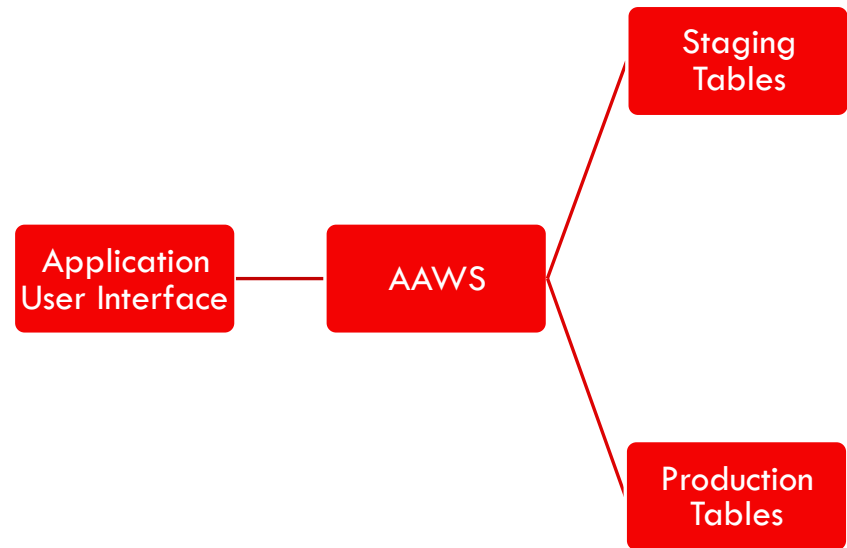
- Get List of Values

A Web Service is a service offered by an electronic device to another electronic device, communicating with each other via the World Wide Web.

WHAT IS AAWS?

Interfaces

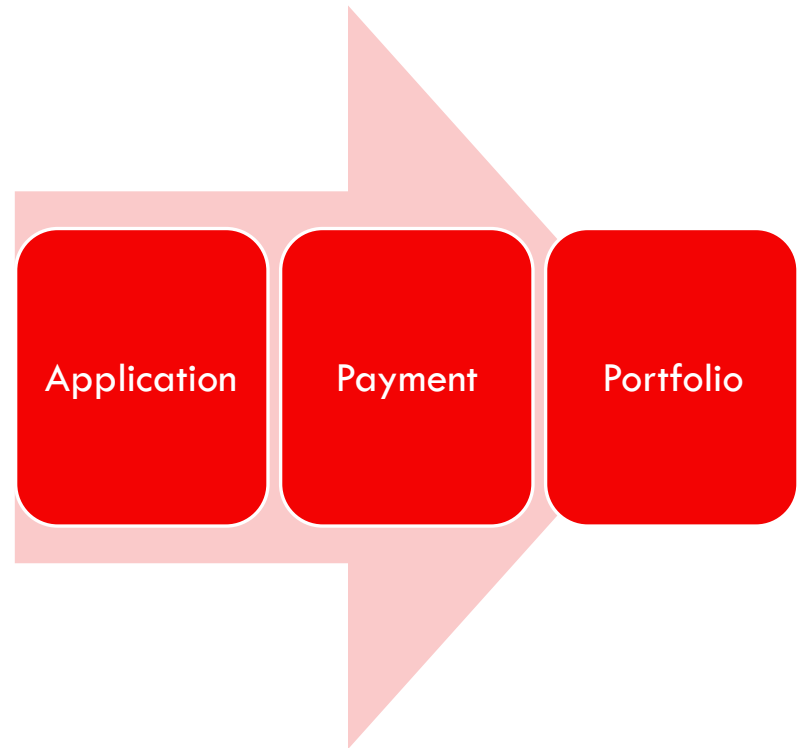
- User Management
- Constituent Transaction Manager
- Admission Application Manager



DESIGN

INITIAL GOALS

- Create the simplest path to admission
- Push all necessary information to the applicant within the application
- Build a customizable UI based on program needs
- Ensure a submitted application is a complete application





Drafting of Project Scope (11 months)

Start April 1,
2011

End March 1,
2012



Project Approval (6 months)

Start March 1,
2012

End September 9,
2012



Technical Development/Testing (7 months)

Start November
20, 2012

End June 17, 2013

DEVELOPMENT

Getting to work.

DEVELOPMENT

DEVELOPMENT TEAM

- Three full-time functional staff
- Two full-time developers
- Sequestered into project space for duration of development/testing



WHAT AAWS IS NOT

IMPORTANT CONSIDERATIONS

- This is not an out of the box, ready-to-use application
- A front-end user interface must be created/purchased
- Customizations might need to be made to conform to your needs



DEVELOPMENT

MAJOR CUSTOMIZATIONS

- **Guest User Registration**
- Application
- Custom Application Setup Tables
- Reference Loader

Western University Graduate & Postdoctoral Studies

Welcome to the admissions application for the School of Graduate and Postdoctoral Studies at Western University. Please review admissions requirements, or your chosen program or study before starting your application. It is your responsibility to ensure all items are complete and submitted within the deadlines posted.

- If you do not have an active Western Identity please visit [span applicant Account](#) or select [Create Account](#).
- If you have an active Western Identity please login with those credentials.

You may save your progress and login at any time.

Sign In

User ID:

Password:

Confirm Password:

Email Address:

Confirm Email Address:

First Name:

Last Name:

Status in Canada:

Hint Question:

Response:

[Create User](#)

[Existing User?](#)

User ID must be between 9 and 30 characters long.

[Forgot My Applicant Account Password](#)

[Forgot My Applicant User ID](#)

Forgot My Applicant Account Password

User ID:

Hint Question:

Response:

[Email Password](#)

If you have an active Western Identity and have forgotten your password please click here to visit [Western's Identity Manager](#)

DEVELOPMENT

MAJOR CUSTOMIZATIONS

- Guest User Registration
- **Application**
- Custom Application Setup Tables
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The screenshot displays a web application interface for setting up an application. At the top, there are four tabs: 'Personal Information', 'Academic History', 'References', and 'Supplemental Questions'. The 'Supplemental Questions' tab is currently selected.

Below the tabs, the 'Application Details' section shows the following information:

- Application ID: 1000000
- Program: Accounting
- Plan: Accounting Diploma

The 'Supplemental Questions' section contains a heading and a paragraph: 'The Supplemental Questions page allows our graduate programs to ask you unique questions that reflect elements of the program you are applying to. The responses you provide are made available to the program during the assessment process.'

Below this, there are three question-and-answer pairs, each with a 'Question' field and a 'Response' field with a blue 'Go' button:

- Question: How did you hear about us?
Response: Academic Counselor
- Question: What service was most helpful to you in deciding to apply to us?
Response:
- Question: What aspect of usmost encouraged you to apply? Please pick the most important.
Response:

On the right side of the interface, there is a 'Checklist' section titled 'Application Checklist' with the following items:

- ☒ Personal Information Entered
- ☒ Academic History Entered
- ☒ References Provided
- ☒ Supplemental Questions Answered
- ☒ Application Fee Paid
- ☒ Supplementary Documents Loaded
- ☒ English Language Proficiency Score

At the bottom right, there is a link that says 'View Application'.

DEVELOPMENT

MAJOR CUSTOMIZATIONS

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Application Program Settings Application Questions Reference Requirements

Academic Institution: UWOC Academic Career: Graduate

Academic Program: GBIOC Biochemistry

Academic Plan: 22121 M.Sc. Biochemistry

Admit Terms Available for Applications

Effective Date: 2015/11/05 Status: Active

Program Message:


Thank you for showing an interest in our graduate program. We have recently committed to ensuring students graduate with MSc or PhD degrees within 2 and 3 years of initial registration as graduate students, and believe that we offer an excellent graduate experience. Program start dates are January 1, May 1 and September 1 of each year. To accommodate the processing of applications, we have set the following dates for the submission of applications.

| Term | Start | Description | Session Open or PHY | Years Open before Term Start | Applications Open Month & Day | Years Closed before Term Start | Applications Close Month & Day |
|------|-------|------------------|-------------------------------------|------------------------------|-------------------------------|--------------------------------|--------------------------------|
| 1 | 1 | Grad Winter Term | <input type="checkbox"/> | 1 | 0501 | 1 | 1016 |
| 2 | 1 | Grad Winter Term | <input checked="" type="checkbox"/> | 1 | 0501 | 1 | 1016 |
| 3 | 6 | Grad Summer Term | <input type="checkbox"/> | 1 | 1001 | | 0202 |
| 4 | 6 | Grad Summer Term | <input checked="" type="checkbox"/> | 1 | 1001 | | 0202 |
| 5 | 8 | Grad Fall Term | <input type="checkbox"/> | 1 | 1001 | | 0831 |
| 6 | 8 | Grad Fall Term | <input checked="" type="checkbox"/> | 1 | 1001 | | 0831 |


DEVELOPMENT

MAJOR CUSTOMIZATIONS

- Guest User Registration
- Application
- Custom Application Setup Tables
- **Reference Loader**

School of Graduate and Postdoctoral Studies 

Reference Form

 Confidential

Welcome Dr. Carol Beynon!

You will be providing your electronic reference letter for the following application:

| | |
|-----------------|-----------------|
| Applicant Name: | Bob Andor |
| Program/Degree: | Chemistry M.Sc. |
| Session: | Fall 2017 |

How long have you known the candidate, and in what capacity? (Give approximate dates.)

If you have recommended previous students to us for graduate study, please mark this candidate in relation to them in event of future for a scholarly activity.

Load Reference Responses

For: Overrid ID: MDU00002 [Reset this form](#)

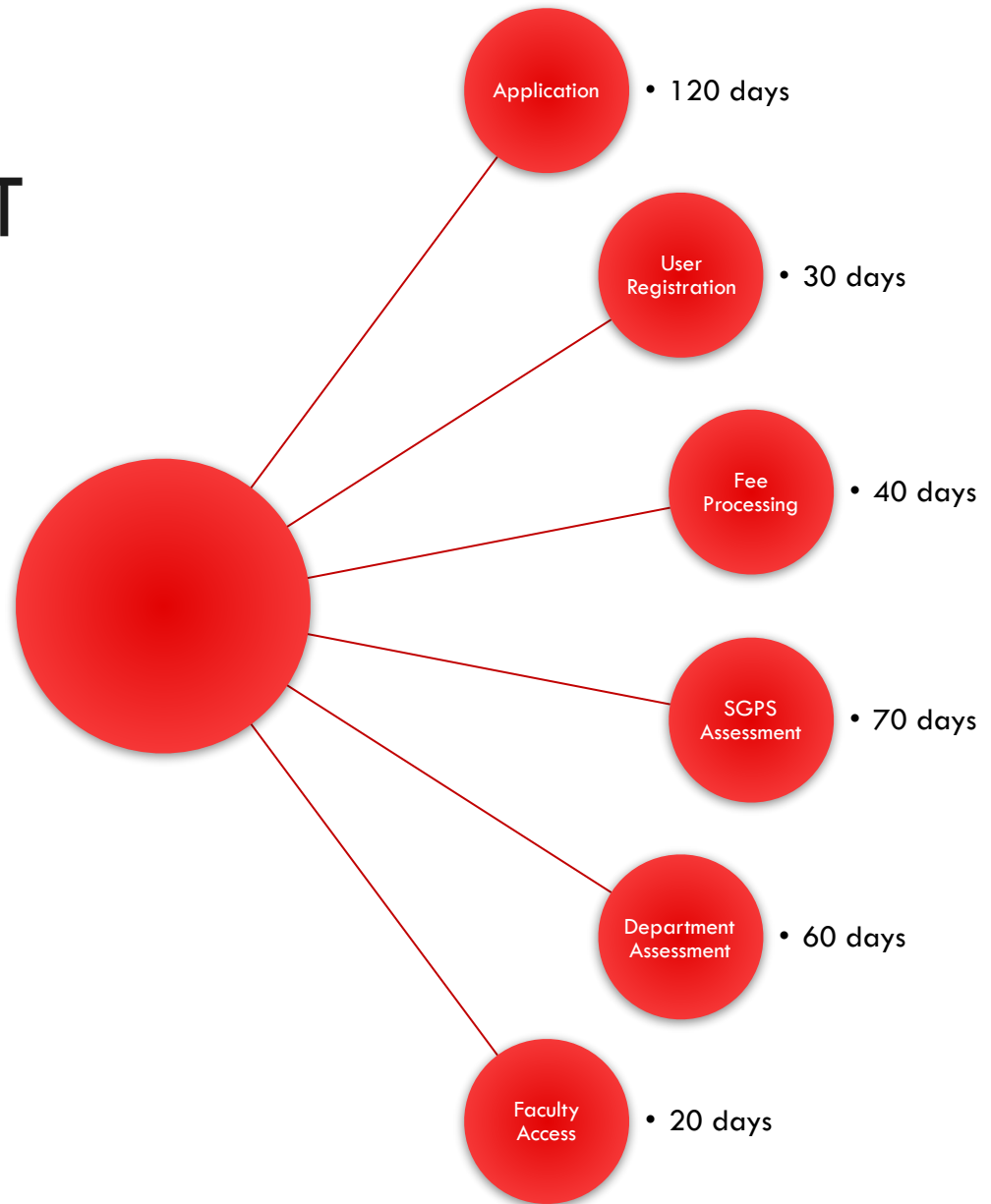
Reference Response Load

File Path and Name:

DEVELOPMENT

MANAGING RESOURCES

- Work divided into 6 development packages
- Allowed project to maximize resources and time



DEVELOPMENT

MANAGING RESOURCES

- Work consisted of development and unit testing
- Functional and technical resources consistently engaged with development and unit testing

| WORK PACKET | START | END |
|--------------------------|--------------|---------------|
| A. Application | Nov 19, 2012 | May 3, 2013 |
| B. User Registration | Nov 19, 2012 | Dec 20, 2012 |
| C. Fee Processing | Feb 11, 2013 | April 5, 2013 |
| D. SGPS Assessment | Jan 30, 2013 | May 5, 2013 |
| E. Department Assessment | Feb 27, 2013 | May 21, 2013 |
| F. Faculty Assessment | Mar 11, 2013 | April 5, 2013 |

WHAT IS SOLA?

UNPACKING THE SOLA

- The sample online application (SOLA) is designed to showcase how AAWS is designed, organized and managed
- Includes embedded technical annotations
- Critical in instructing technical analysts on AAWS functions

The screenshot displays the SOLA application interface. At the top, a navigation bar includes links for Basic Information, Contact Information, Emergency Contact, Academics, Other, and Submit. The main form is divided into three sections:

- Basic Information:** Fields for Legal First Name (Jane), Legal Middle Name (Mary), Legal Last Name (Smith), Name Suffix (empty), Preferred First Name (Lola), Date of Birth (01/01/1980), Birth Country (USA), Birth City (San Diego), Birth State (CA), and Gender (Female).
- Citizenship Information:** Fields for Country (USA) and National ID (XXXXXXXX).
- Military Information:** A dropdown menu for Military Status set to "No Military Service".

At the bottom of the form are buttons for "Cancel", "Save", and "Next Step".

For more details ["Working with AAWS and the Sample Online Application \(SOLA\)"](#)



TESTING

SHORT DESCRIPTION

TESTING

UNIT TESTING

Each work package had a dedicated schedule for unit testing

- Does this package do what it's supposed to?

Each unit testing phase lasted 1 to 3 weeks depending on the complexity of the package

TESTING

INTEGRATED TESTING

Two months allocated to integrated testing.

- 34 distinct user scenarios were created
- 113 unique errors/bugs were logged
- Two phases of testing – DEV and QAT
- Issues surrounding the migration of fixes were constant

RESULTS

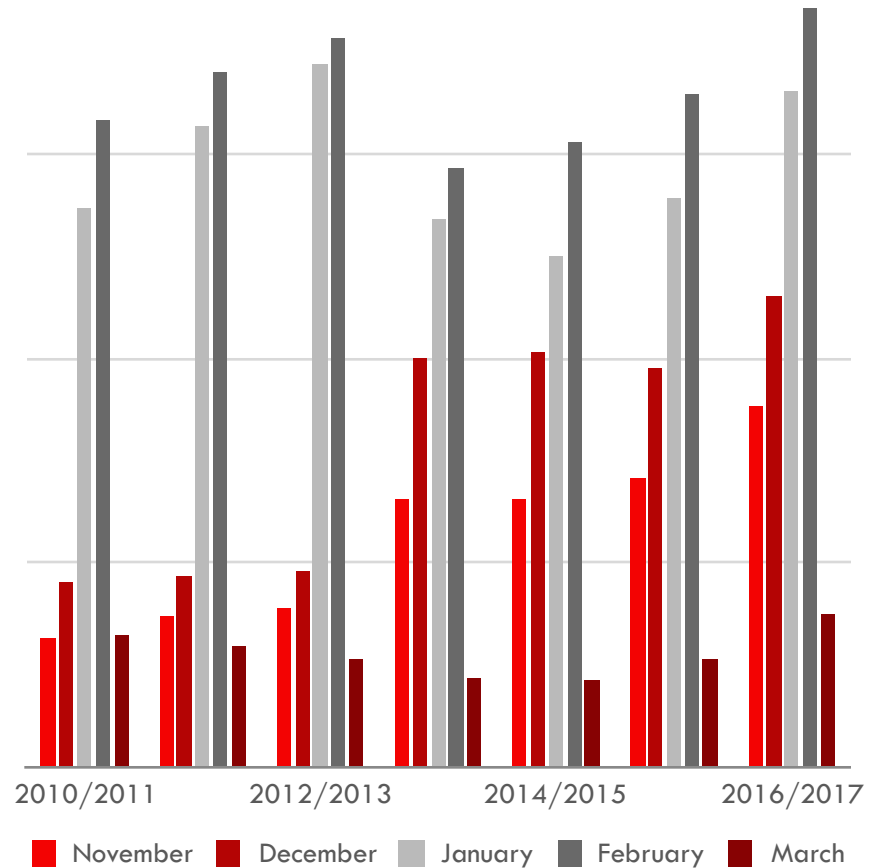
After a 28-month project,
what did we accomplish?

RESULTS

APPLICATIONS ARRIVE EARLIER

- Overall application numbers maintain steady growth over the years.
- Applicants are submitting applications earlier than ever before.

Applications Submitted by Month

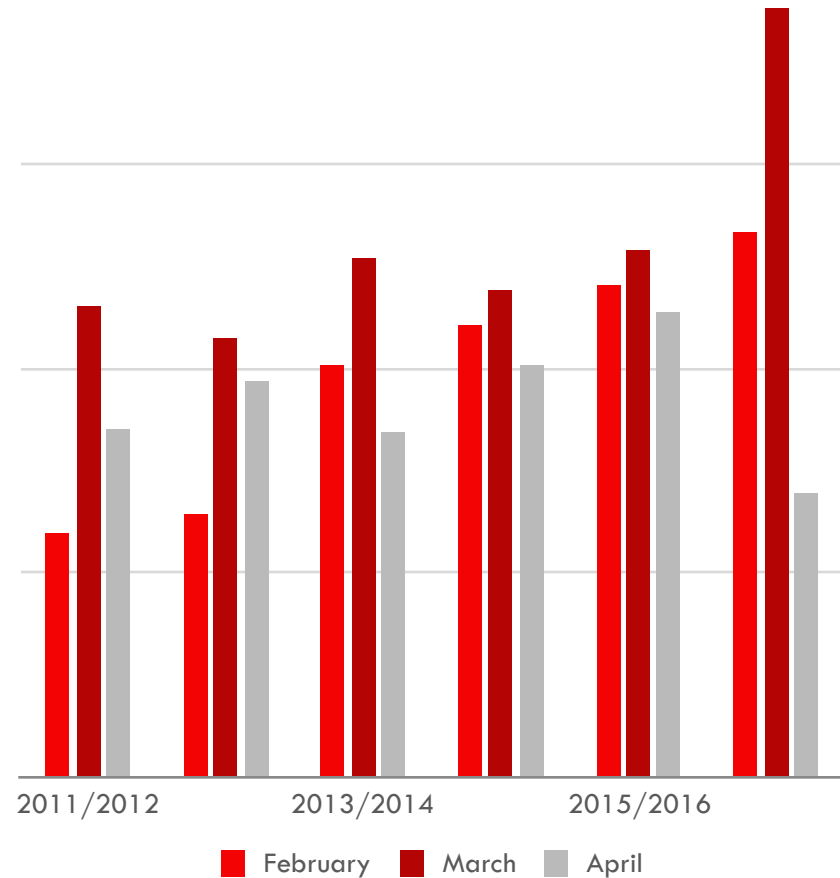


RESULTS

OFFERS ARE SENT OUT EARLIER

- Offers are now sent out significantly earlier than prior to project
- Peak offer time has shifted from March/April to now include February

Offers Sent out by Month

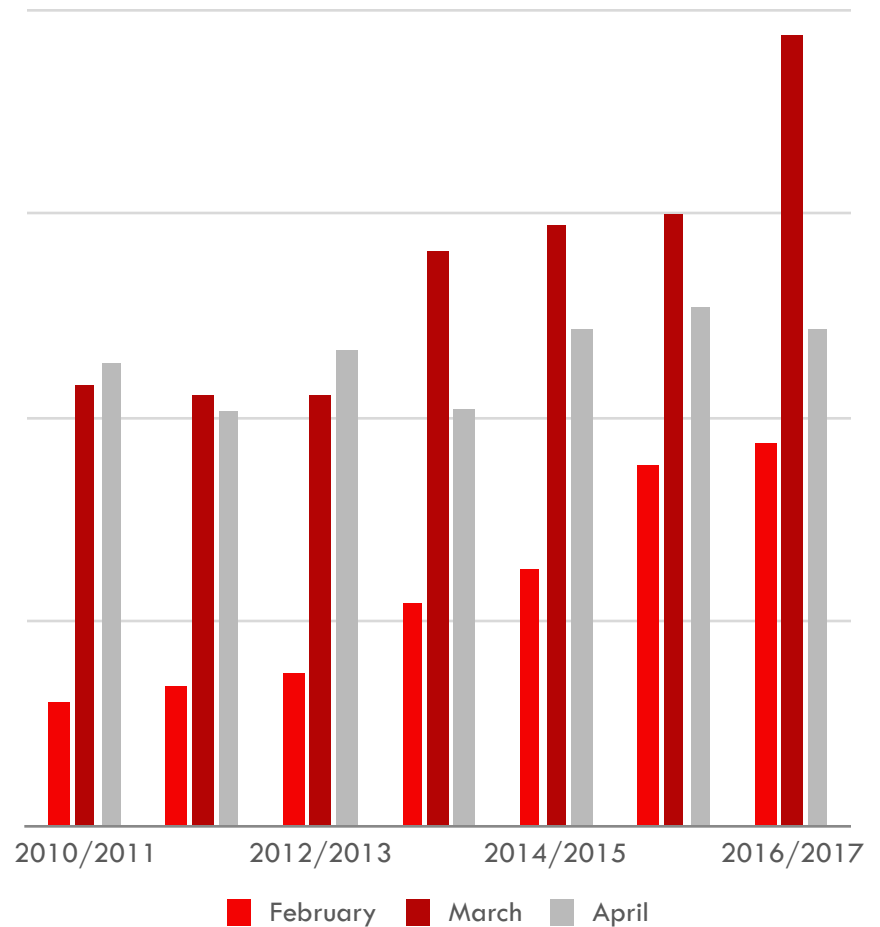


RESULTS

DEINs ARE RECEIVED EARLIER

- Acceptances are now received significantly earlier in the admission cycle

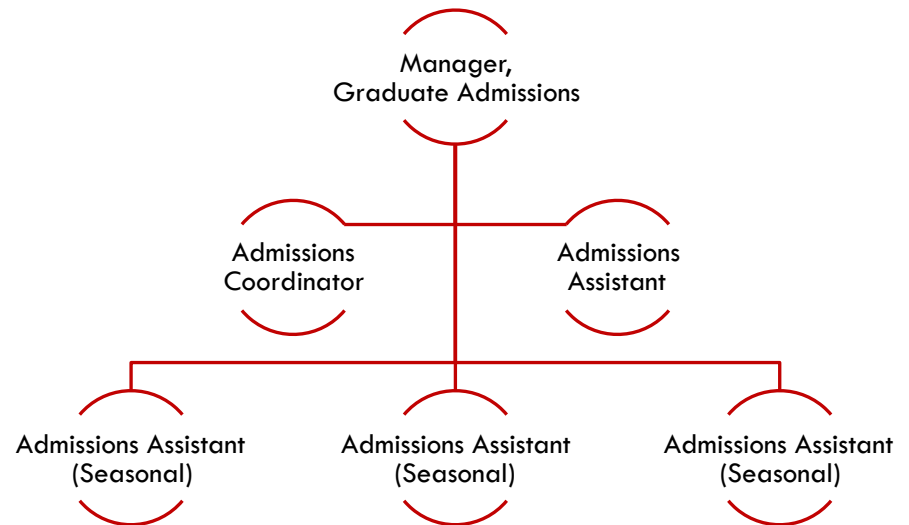
Acceptances Received by Month



RESULTS

STAFFING CHANGES

- SGPS now supports a full-time admissions team with seasonal coverage during peak season
- Application fees now collected directly into SGPS manage the costs of the team



LESSONS LEARNED

- You can't test enough to replicate what you will encounter after release
- Don't rush changes into the product
- Don't underestimate the support needed for an application service open 24/7
- Where possible, collect feedback from users
- Plan for a regular schedule of updates to your service

CONCLUDING THOUGHTS

ANY QUESTIONS?

TO BE CONTINUED

ANY QUESTIONS?

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**ALL ALLIANCE PRESENTATIONS WILL BE
AVAILABLE FOR DOWNLOAD FROM THE
CONFERENCE SITE**



THANK YOU!

