Transforming the Research Administration Process

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HERUG 2016, Session R2

UNIVERSITY OF TORONTO

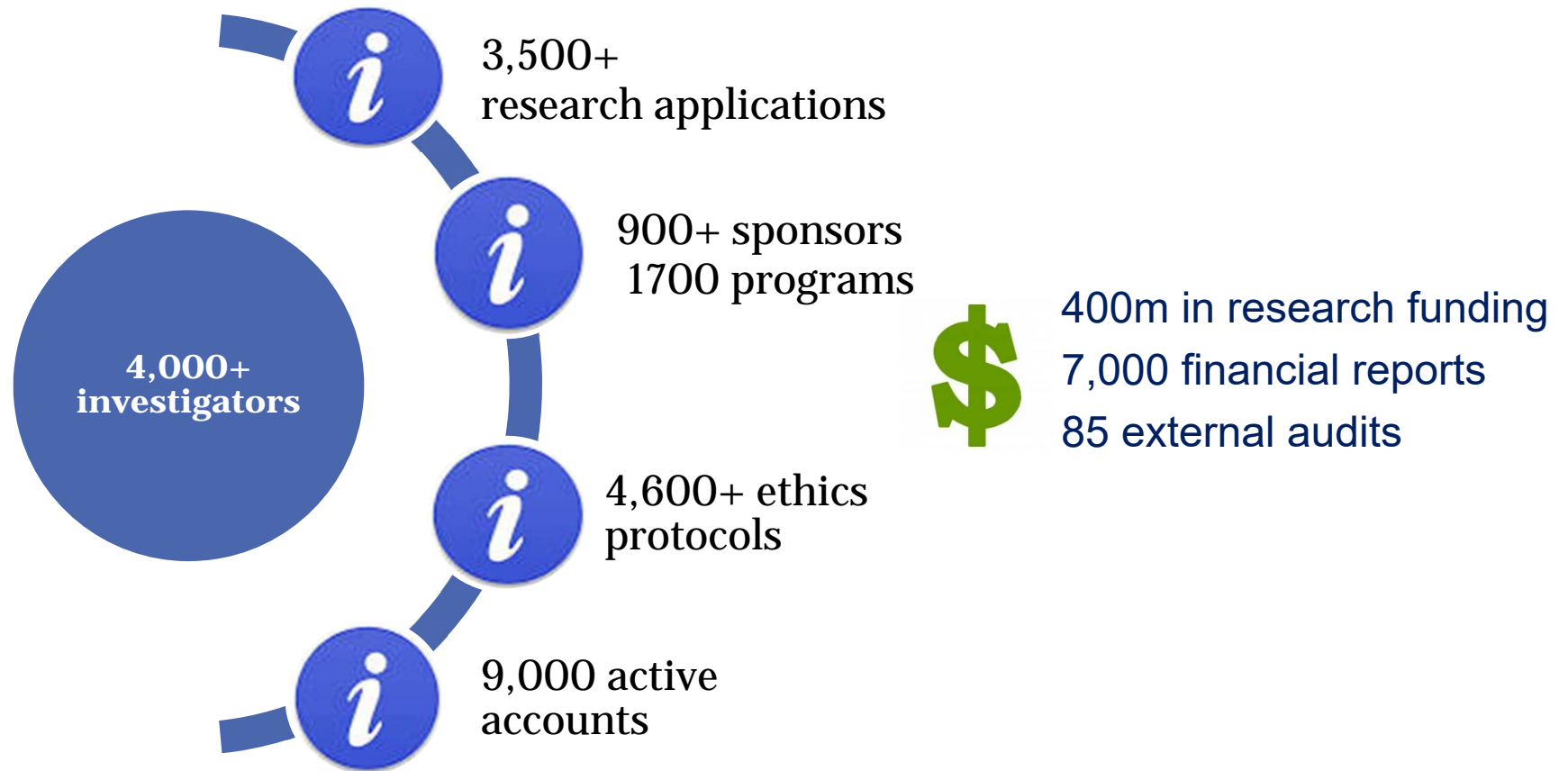DIRSTEIN CONSULTING INC.
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Outline

- Background

- Vision and conceptual design

- More Detail …

  – Reimagining our business processes

  – Demonstration

- Results

- Questions

The University of Toronto

- 5,000 research faculty
- 84,000 students on three campuses
- 9 hospital partners
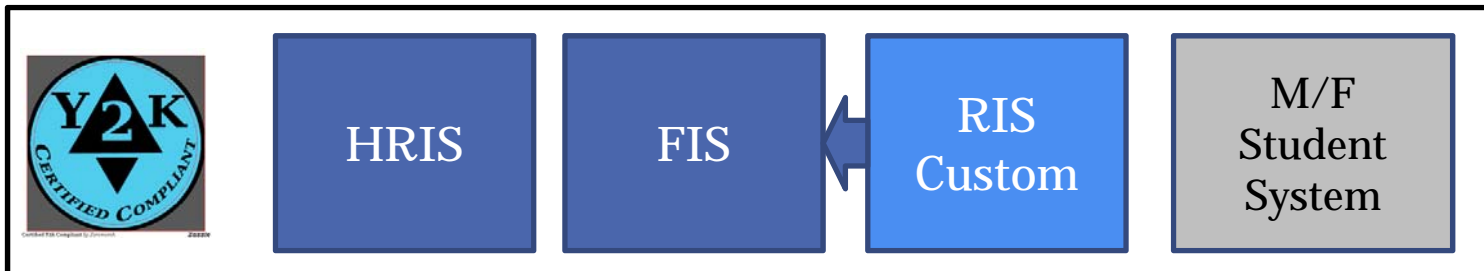- 134 research admin units
- $1.1 billion in research funding

Scale and Complexity

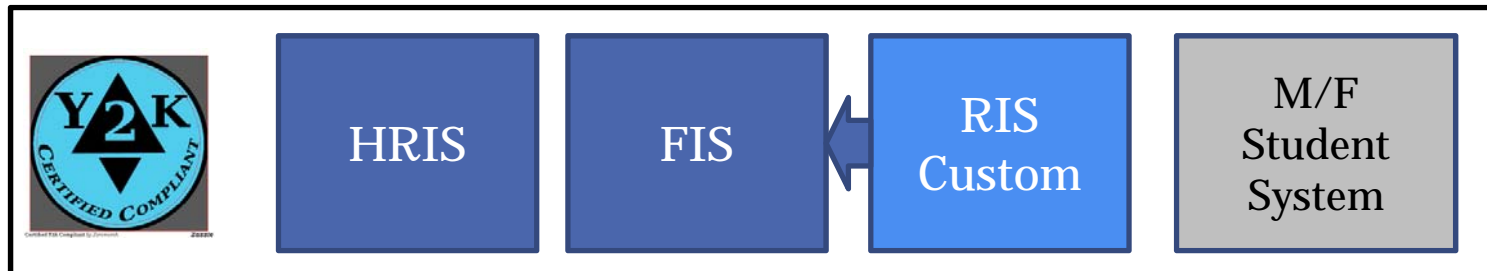**4,000+ investigators**

3,500+ research applications

900+ sponsors 1700 programs

4,600+ ethics protocols

9,000 active accounts

$ 400m in research funding
7,000 financial reports
85 external audits

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The way we were….

It was 1995 …

and it was good for
a very long time…

| Y2K CERTIFIED COMPLIANT | HRIS | FIS | RIS Custom | M/F Student System |

But as the years rolled along….
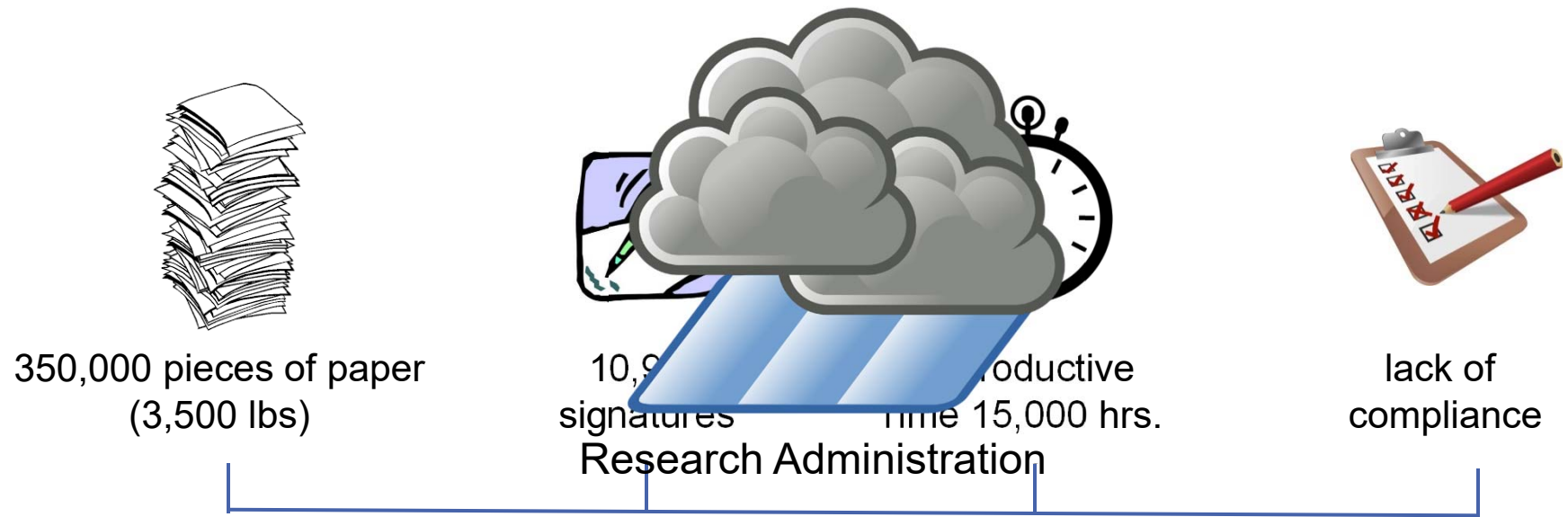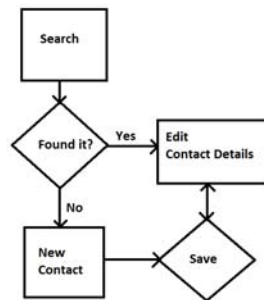
350,000 pieces of paper
(3,500 lbs)

10,9__ _____ __roductive
signatures   Time 15,000 hrs.
Research Administration

lack of
compliance

Y2K CERTIFIED COMPLIANT	HRIS	FIS	RIS Custom	M/F Student System
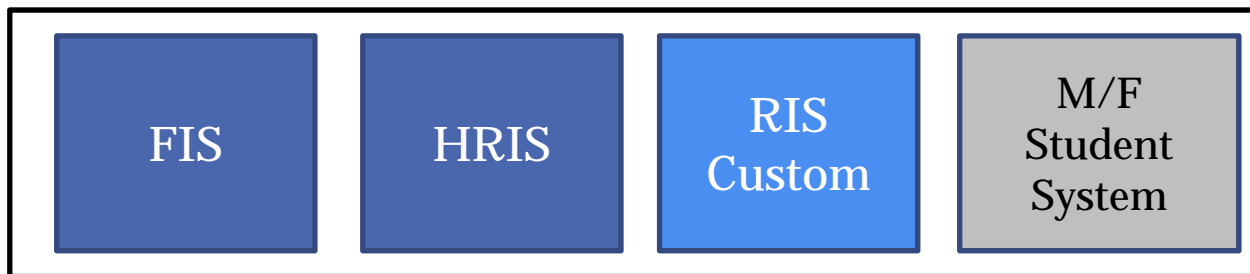
Conceptual Design
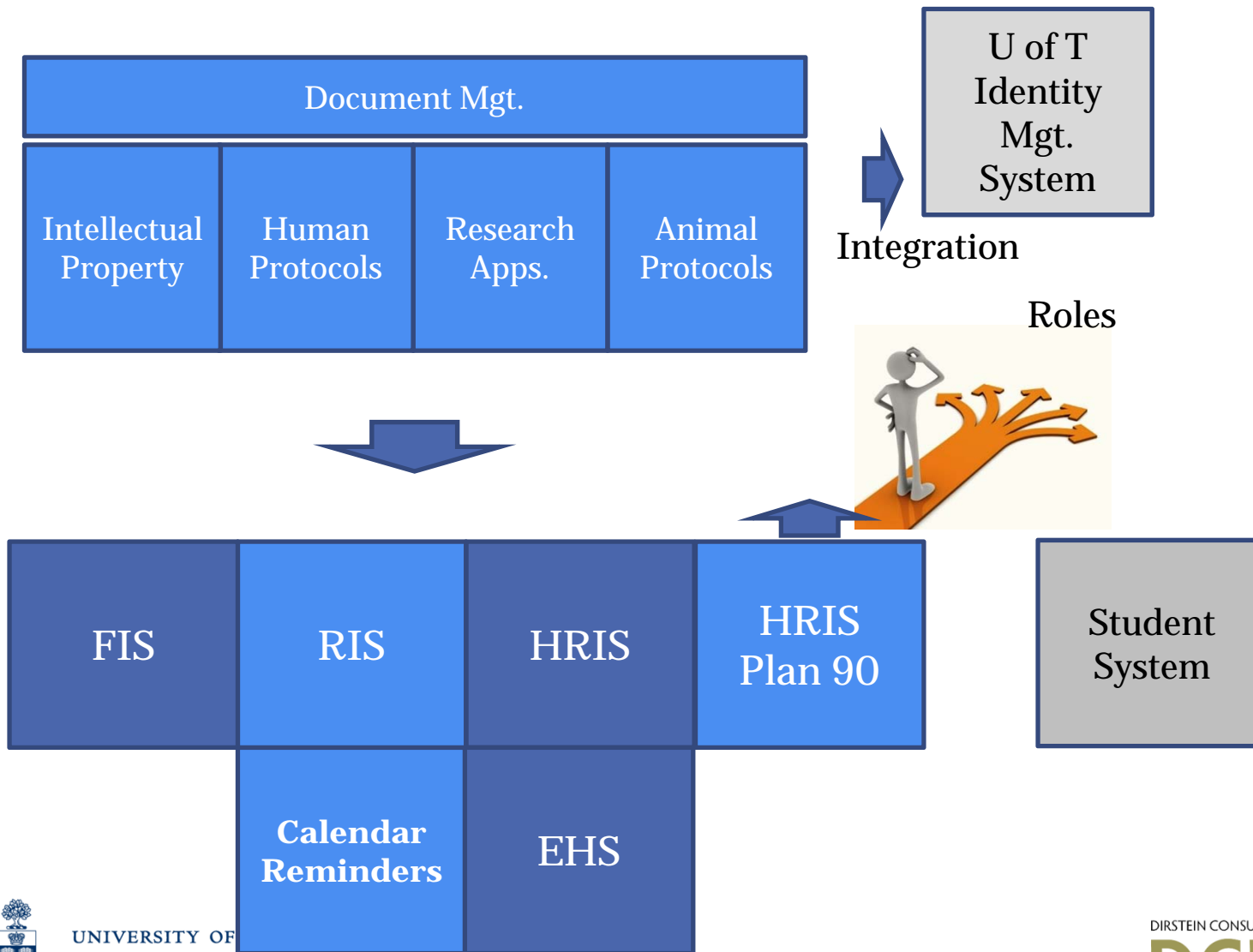
On a more technical level ..

IBM AIX
DB2

SAP NetWeaver Java

Web Dynpro ABAP

Web Services

SAP Portal

Net-Weaver ABAP

RFC

SAP ECC 6

HTTP

SAP Content Server

U of T
ID Mgt.
Shibboleth
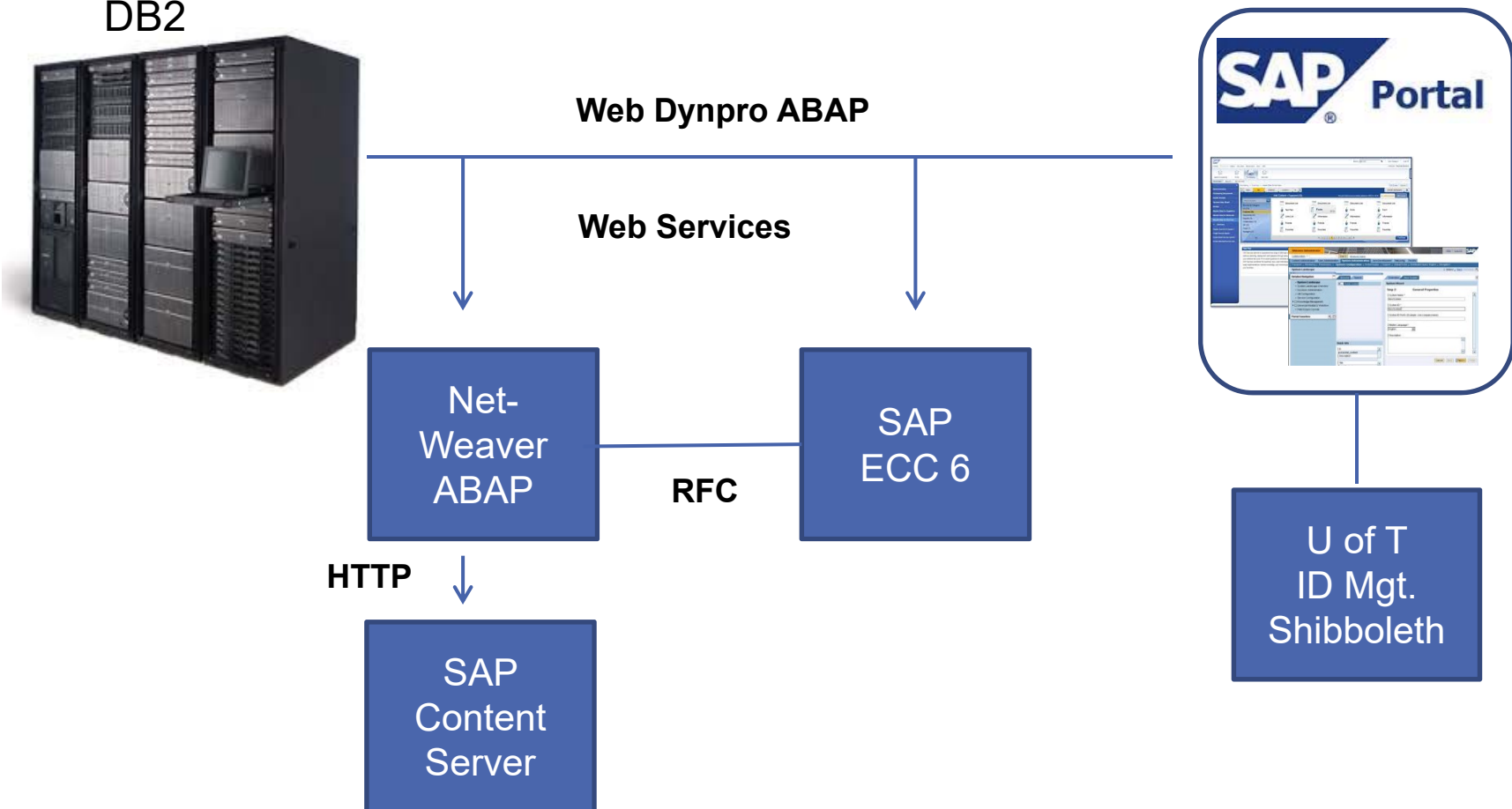
Clockwork Consulting

Security

- Multiple firewall protection
- Utilizes https protocol
- Access based on role
- SAP ID linked to Shibboleth
- 2-factor authentication for high security roles!

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Clockwork Consulting

Our Journey …

Reimagine our business processes ....

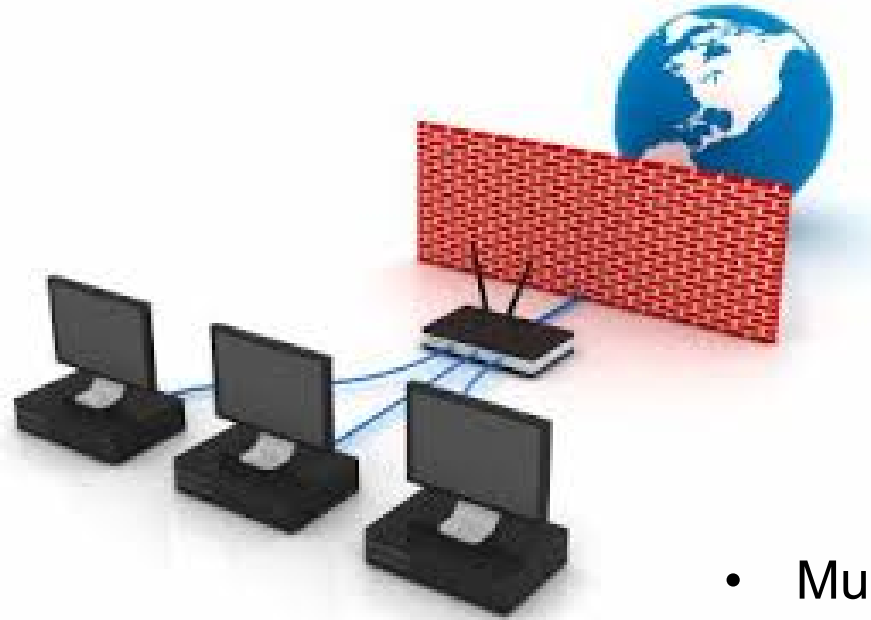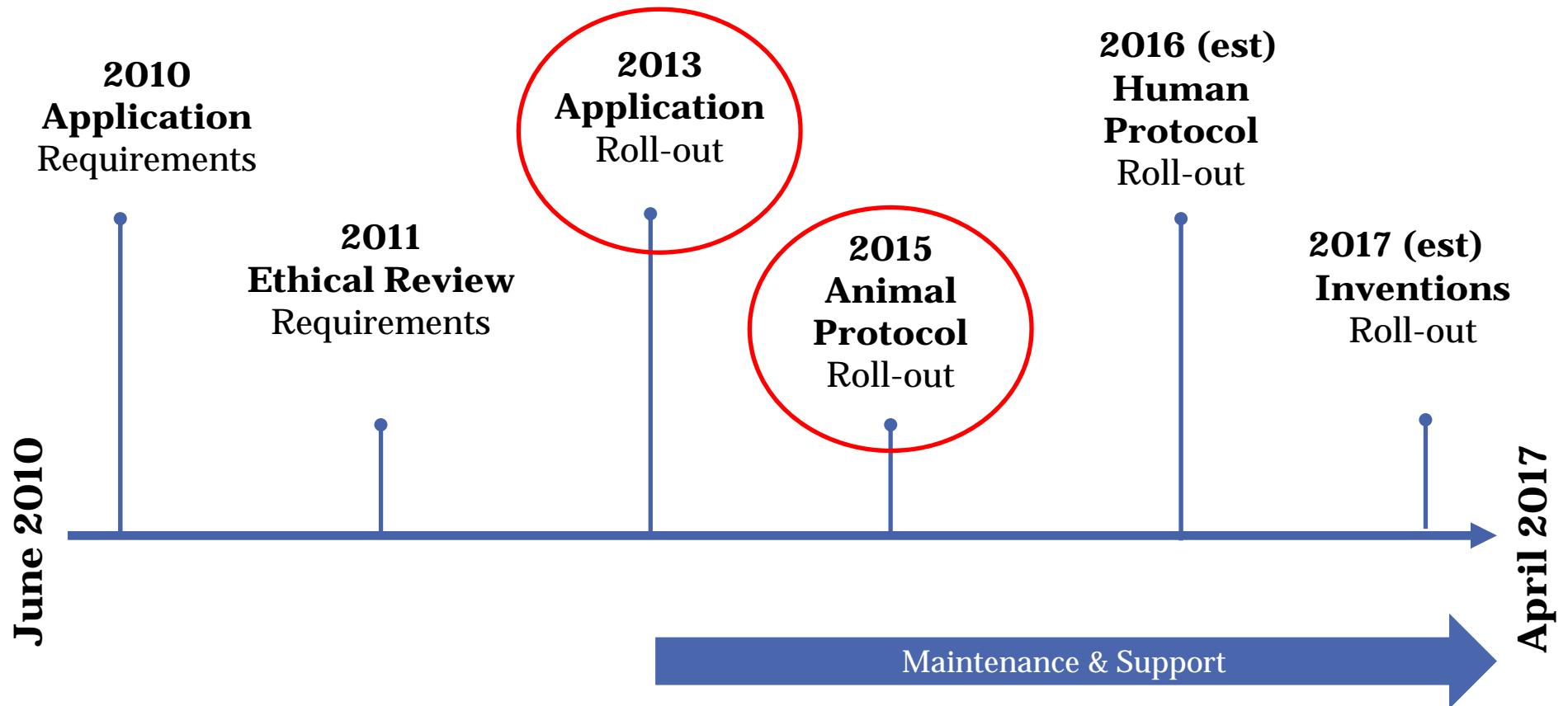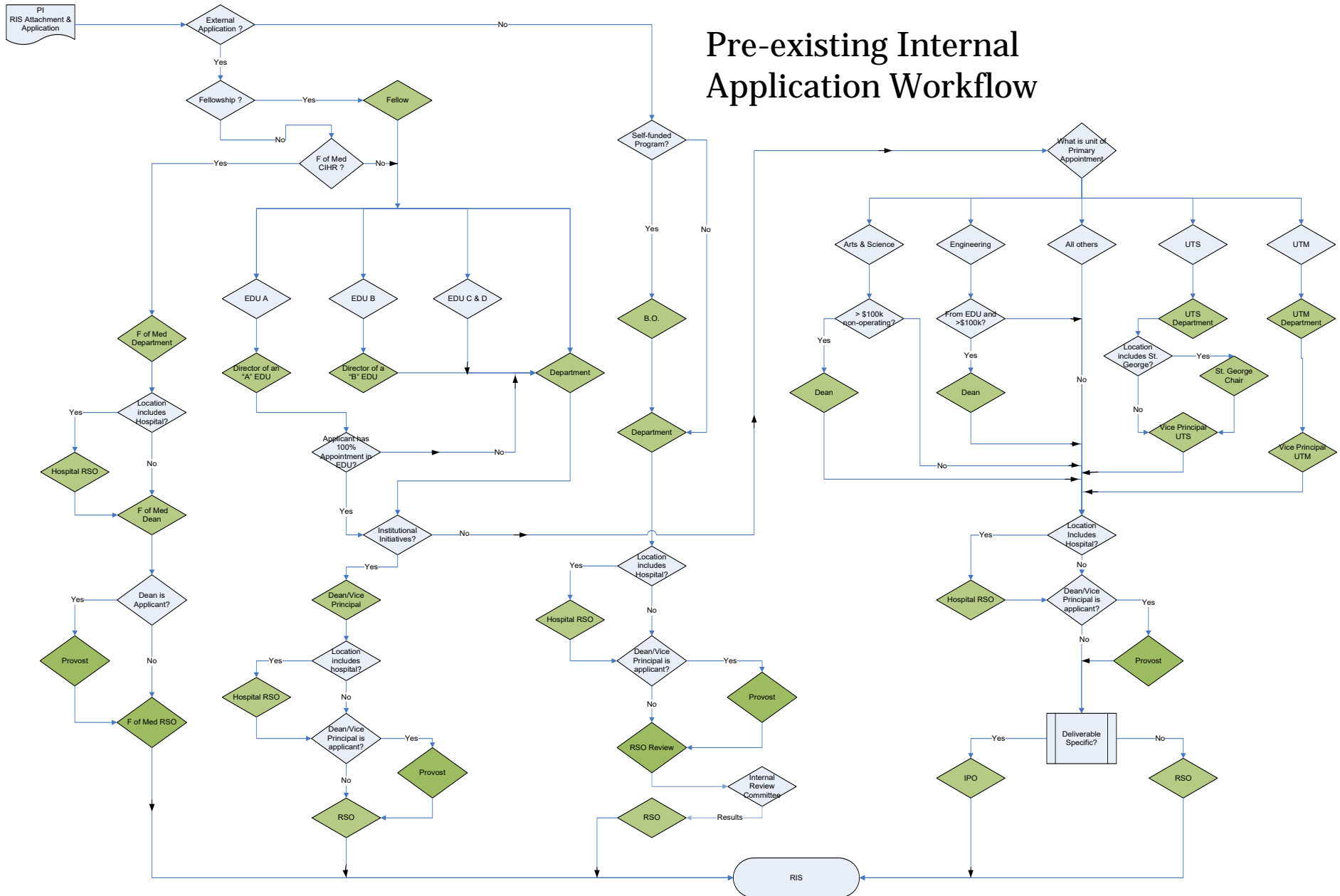# Pre-existing Internal Application Workflow

PI RIS Attachment & Application

External Application? — No
— Yes → Fellowship? — Yes → Fellow
— No → F of Med CIHR? — Yes → F of Med Department — No

Self-funded Program? — Yes → B.O. → Department — No

What is unit of Primary Appointment?
- Arts & Science → > $100k non-operating? — Yes → Dean
- Engineering → From EDU and >$100k? — Yes → Dean
- All others
- UTS → UTS Department
- UTM → UTM Department

EDU A → Director of an "A" EDU
EDU B → Director of a "B" EDU
EDU C & D → Department

F of Med Department → Location includes Hospital? — Yes → Hospital RSO → F of Med Dean — No
Dean is Applicant? — Yes → Provost — No → F of Med RSO

Applicant has 100% Appointment in EDU? — Yes → Institutional Initiatives? — No → Location includes Hospital? — Yes → Hospital RSO — No → Dean/Vice Principal is applicant? — Yes → Provost — No → RSO Review → Internal Review Committee — Results → RSO

Institutional Initiatives? — Yes → Dean/Vice Principal → Location includes hospital? — Yes → Hospital RSO — No → Dean/Vice Principal is applicant? — Yes → Provost — No → RSO

UTS Department / Location includes St. George? — Yes → St. George Chair — No → Vice Principal UTS
UTM Department → Vice Principal UTM

Location Includes Hospital? — Yes → Hospital RSO — No → Dean/Vice Principal is applicant? — Yes → Provost — No → Deliverable Specific? — Yes → IPO — No → RSO
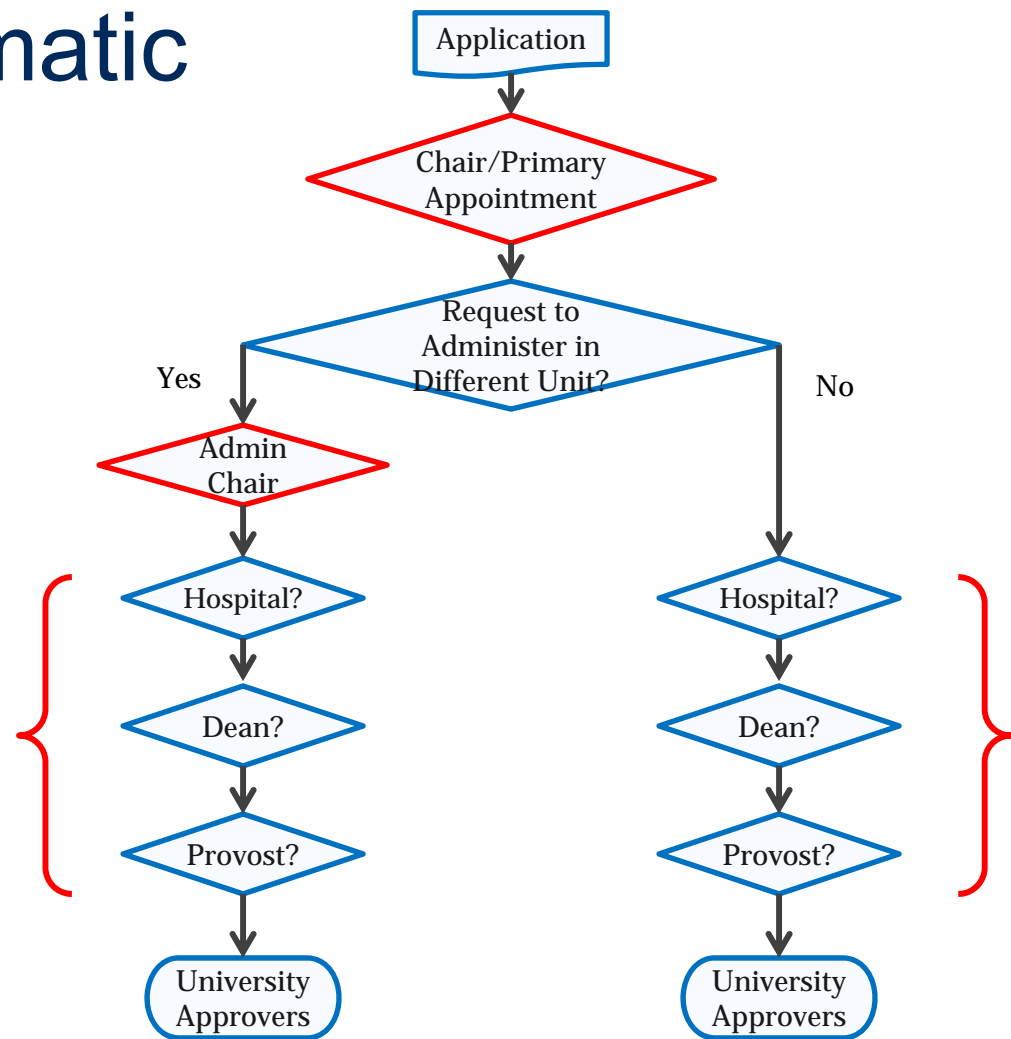
RIS

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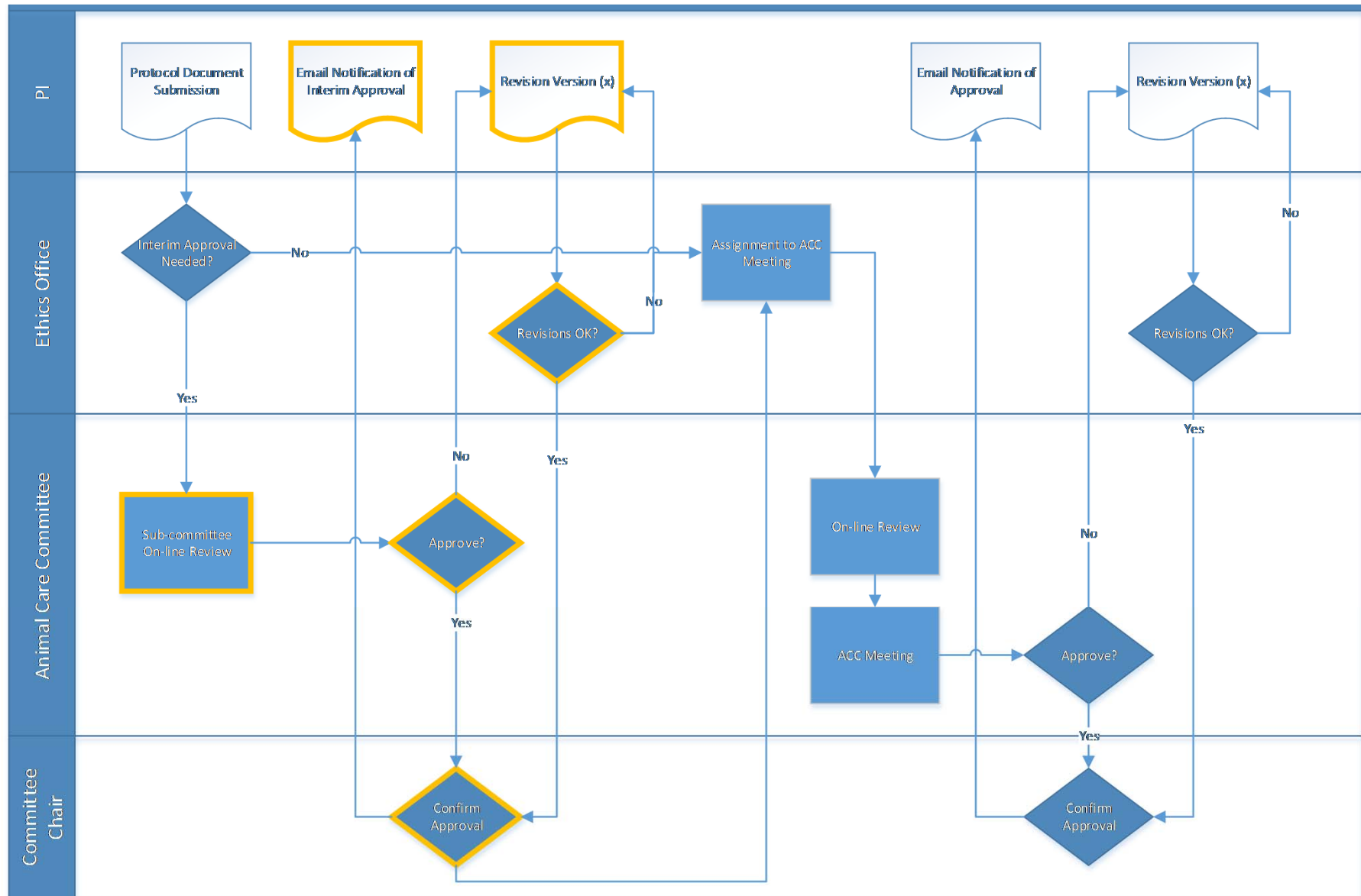
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Approval Schematic

- Assistant may prepare and forward to PI

- PI submits goes to Chair/Director of Unit of Primary Appointment

- Request to Administer in a different unit?
  - No
  - Yes
- Other Approvals required based on escalation rules

Application

Chair/Primary Appointment

Request to Administer in Different Unit?

Yes   No

Admin Chair

Hospital?   Hospital?

Dean?   Dean?

Provost?   Provost?

University Approvers   University Approvers

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Animal Protocol Process (Simplified)

How: Plan 90 - Custom HR Objects:

HRIS Plan 90

- All roles
- University Approver Groups
- Affiliated Hospitals
- Hospital Research Offices
- Divisional Research Offices
- Animal Care Committees
- Animal Care Panels
- Research Ethics Boards
- Research Ethics Panels
- Animal Facilities

Bold=Derived, *Italics=Designated*, Red = Sys Admin

MRA Roles (# of users)	MRAP Roles (# of users)	MRHP Roles (est. #)
PI (4094)	**Animal PI (Faculty & External) (223)**	**Faculty Applicant/Collaborators & External (4094)**
PI Assistant (199)	*PI Assistant (Staff & Student) (35)*	**Supervisor**
Co-PI/Collaborator (4055)	*Research Assistant (10)*	*Student (UG/G/PDF) (2000)*
Departmental Chair (111)	Quality Assurance Officer (VPRI) (2)	*PI Assistant*
Alternate Chair (47)	Research Ethics Director (VPRI) (1)	*Student PI Assistant*
Dept. Business Officer (56)	Research Ethics Manager (VPRI) (2)	**Departmental Chair (111)**
Hospital Approver (25)	*Committee/Panel Member (58)*	*Alternate Chair*
Hospital RSO Staff (13)	*Committee Chair (5)*	**Dean (20)**
Dean (23)	Administrative Head (2)	*Alternate Dean*
Alternate Dean (26)	Facility Manager (4)	**Provost (1)**
Divisional RSO Staff (25)	*Facility Staff (27)*	*Alternate Provost*
Provost (1)	Facility Veterinarian (4)	Quality Assurance Officer (VPRI) (3)
Alternate Provost	Training Manager (10)	Research Ethics Director (VPRI) (1)
Provost's Assistant	System Administrator (4)	Research Ethics Manager (VPRI) (3)
Approvers (VPRI) (35)	Data Manager	*Board/Panel Member (65)*
Managers (VPRI)	Auditor (1)	*Board Chair (3)*
Research Accts. (VPRI) (1)		Training Manager (VPRI)
Controlled Goods (VPRI) (1)		System Administrator (3)
System Administrator (VPRI) (3)		Data Manager
Commercialization Officer (VPRI) (1)		Auditor
Data Manager (4) Auditor (5)		

Demonstration ....

Visit the Helpline for system availability, extended hours prior to major deadlines and planned maintenance downtime.

My Research - TEST SITE

My Research Helpline

Mon - Fri 9:00 a.m to 5:00 p.m.

$ 416.946.5000 | raise@utoronto.ca

Supported Browsers

Training Schedule

User Guide

Login to My Research Test Site

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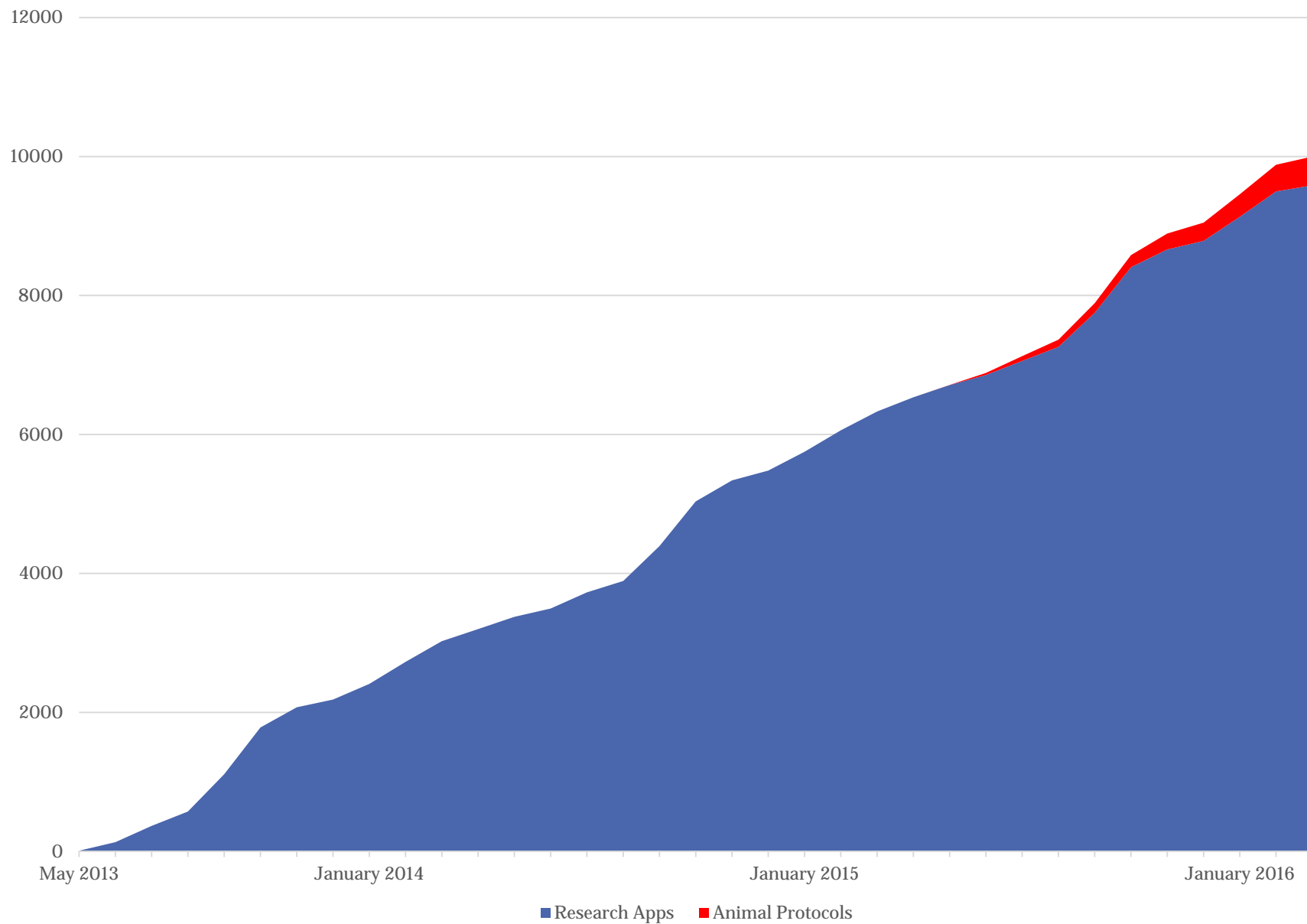DIRSTEIN CONSULTING INC.

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Results….

Cumulative # of Documents Processed

Research Apps | Animal Protocols

Current Impact

Time:

- Faculty/Grad Students/Assistants: ~ **6000 hours saved annually** (due to electronic approvals & clearly identified approval hierarchy)

- Central Research Staff: **1,000 hours saved annually** (eliminated manual data entry, photocopying, filing etc.)

Paper:

- **1.75 tons** of paper applications and ethical protocols eliminated

Institutional Reputation:

- Enhanced compliance with U of T and sponsor policies, greater accountability, and improved records management

- A clearer, simpler, more efficient means of obtaining institutional endorsement on research applications for our faculty

http://www.research.utoronto.ca/about/project-raise/

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Key Success Factors

Improvements for
All stakeholders

Extensive consultation

CIO – VPRI
partnership

Dedicated
- U of T
- DCI
- Clockwork

RESOURCES

flow

Processes defined
prior to development

Bumps/Lessons Learned

- Browser Issues – support/testing
- Password confusion (we have too many!)

- Incorrect routing due to HR data quality issues
- PIs often thought application was sent to sponsor
- Not everyone embraces transparency & accountability

- Researchers do not read instructions, watch training videos or attend workshops!

- Have live support on-hand to target issues as arise

Thank you!

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