

The First EA Education Meeting

Brian H. Cameron, Ph.D.

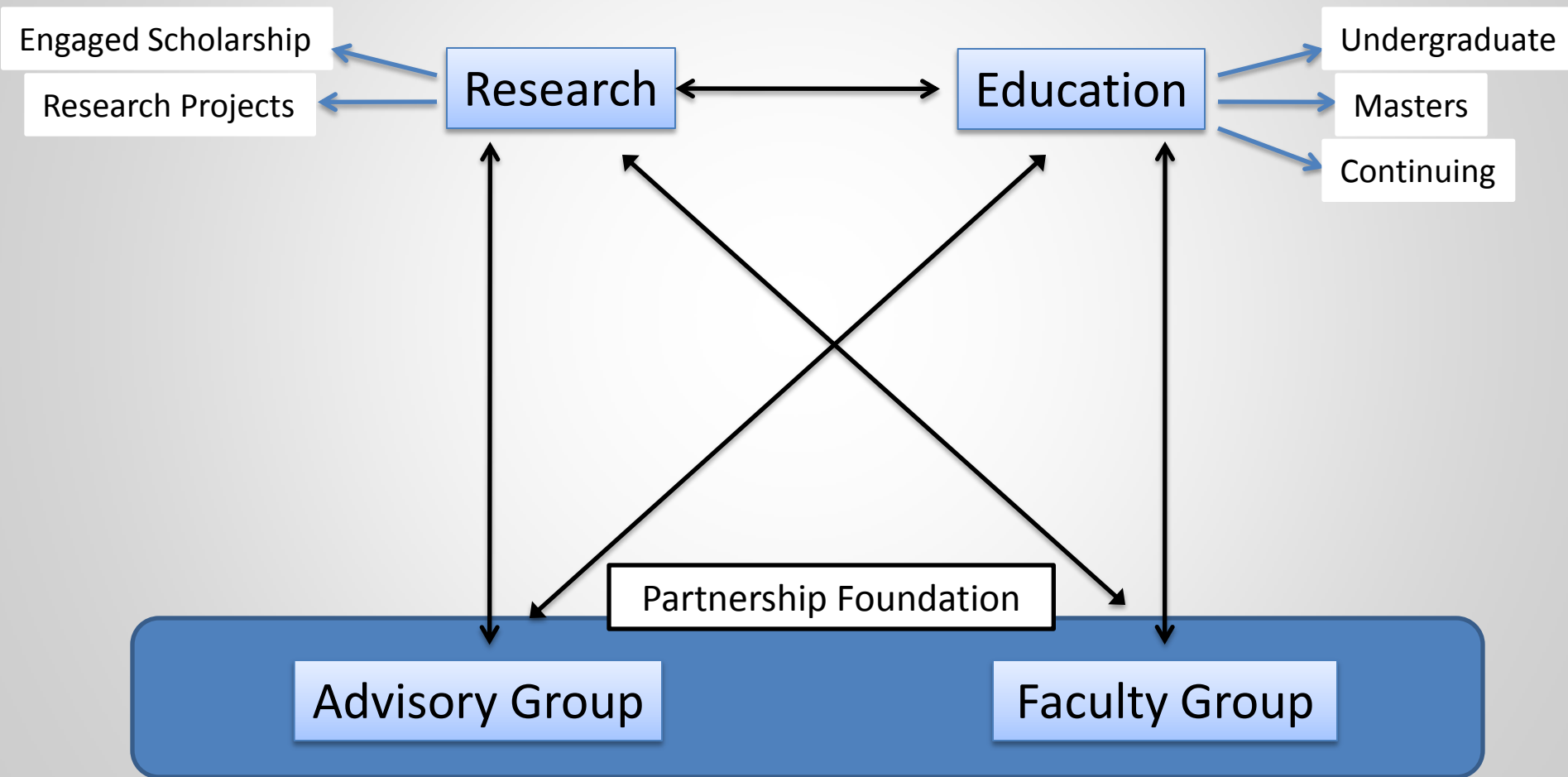
Executive Director, Center for Enterprise Architecture
The College of Information Sciences & Technology
The Pennsylvania State University

Center Overview

Center for Enterprise Architecture Mission

- Advance the discipline of EA by creating new knowledge that showcase a partnership between academe and industry.

The Center for Enterprise Architecture



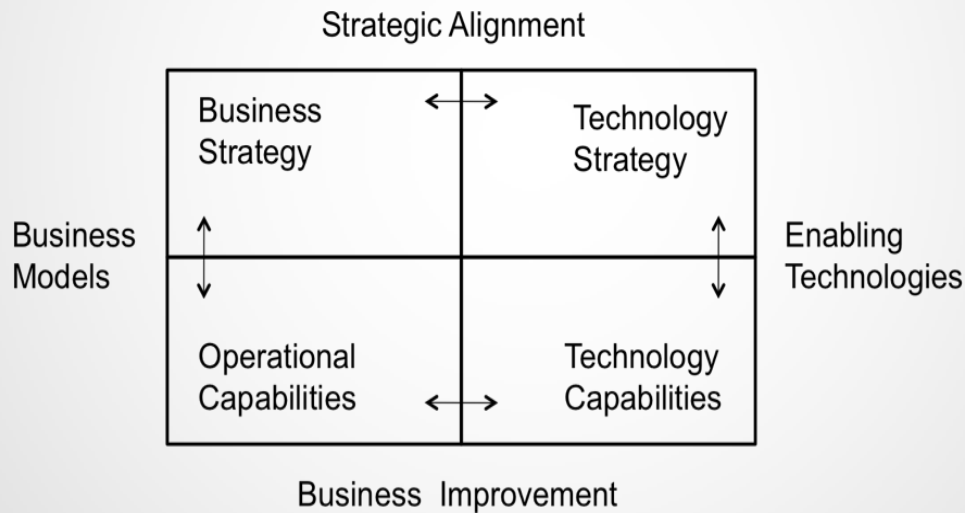
The Center for Enterprise Architecture

The purpose of a proposed Center for Enterprise Architecture (CEA) is to gather intellectual resources across Penn State to address open and important research concerns and questions that span the design, functioning and governance of contemporary, information-driven enterprises. Research will include the underlying information technology architectures, data and application architecture and the complex, enterprise-level systems of systems that make use of these underlying architectures in a legislative and institutional marketplace.

The Center will apply multi-disciplinary and inter-disciplinary research methods to address large-scale application domains such as healthcare informatics, large service-based and manufacturing firms, non-profit initiatives, federal and state government transformation, and the design of homeland security agencies. The architecture and systems of systems perspective will allow for addressing concerns focused on the design and effective functioning of organizations and networks of organizations with results such as enterprise transformation, enterprise and network design, global information infrastructure design and management, and global enterprise presence and competitiveness.

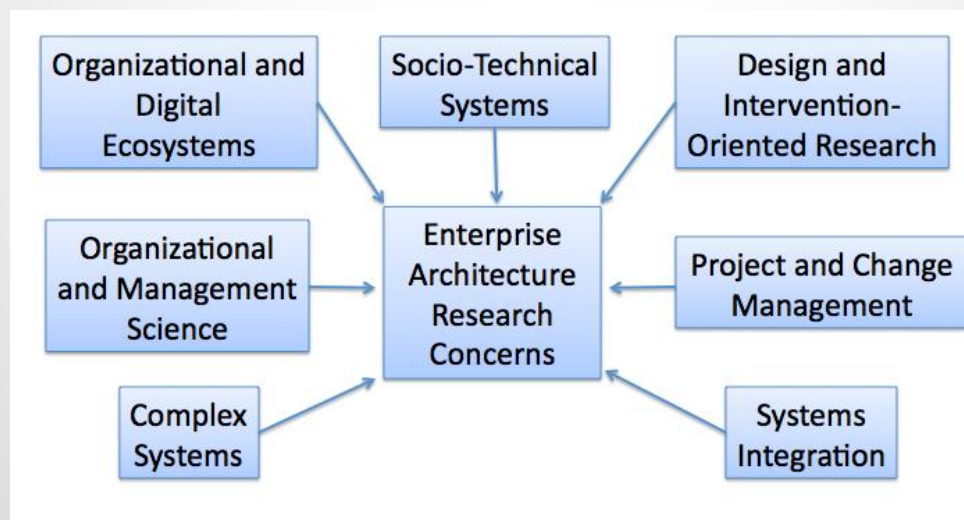
Focus

The focus of the Center for Enterprise Architecture is to direct attention and resources to the increasingly critical problem of co-designing the information technology infrastructure and business logic.



Center Perspective

The holistic nature of research endeavors aimed at understanding and improving the craft and practice of EA would mean that a number of disciplines will be implicated in defining the problem domain as well as contribute perspectives, approaches and techniques that will be valuable for addressing EA research concerns. Research on EA can benefit from these perspectives contributed by a number of allied disciplines.



Core Faculty

College of Information Sciences and Technology (IST)

Brian Cameron	Executive Director Professor of Practice	Enterprise Integration, Enterprise Architecture, Service Computing, Information Architecture, Portfolio Management
Sandeep Purao	Co Director & Center Research Director Associate Professor of IST	Organization Science, Software Engineering, Management Information Systems
Ed Glantz	Professor of Practice	Supply Chain and Information Systems, Security and Risk Analysis
Rosalie Ocker	Senior Instructor	Management Information Systems, Virtual Teams
Shawn Clark	Professor of Practice	Project Management, Consulting, Organizations

Affiliate Faculty

College of IST

John Bagby	Professor of IST		Information Policy, Law
Luke Zhang	Assistant Professor		Data Visualization
Heng Xu	Assistant Professor		Information security
Gouray Cai	Associate Professor		Geographic Information Systems
Angsana Techatassanasoontorn	Assistant Professor		Community informatics
Madhu Reddy	Associate Professor		Computer-supported cooperative work, Healthcare operations
Fred Fronseca	Associate Professor		Ontologies, Geographic information systems
Lisa Lenze	Director of Learning Initiatives		Instructional Design

College of Engineering

Tim Simpson	Professor, Mechanical Engineering		Engineering design and design methodology
Soundar Kumara	Professor, Industrial Engineering		Agent-based Modeling and Complexity

College of Liberal Arts, Labor Studies and Employment Relations

Sumitha Raghuram	Associate Professor, Labor Studies	Virtual work, Career trajectories
College of Arts and Architecture		
Daniel Willis	Professor, School of Architecture	Design studies
Applied Research Laboratory		
Bob Walter	Research Director	Enterprise Systems
College of Education		
Hoi Suen	Professor, Educational Psychology	Testing and evaluation for learning
Smeal College of Business		
Skip Grenoble	Professor, Supply Chain	Supply Chain Management
John Jordan	Clinical Professor of Supply Chain and Information Systems	Technology Trends
Albert Vicere	Professor, Business Administration	Leadership Development
Gene Tyworth	Professor, Supply Chain	Supply Chain Development and Integration
Penn State Erie		
John Magenau	Associate Professor of Management	Project Management, Supply Chain
Jeff Pinto	Professor of Management	Project Management, Supply Chain Information Systems
Penn State Beaver		
Kay Wijekumar	Associate Professor of IST	Enterprise Integration, Instructional Systems
Penn State Great Valley		
James Nemes	Professor of Mechanical Engineering	Enterprise Systems
Penn State Harrisburg		
Girish Subramanian	Professor of Computer Information Systems	Global Software Development, Data Warehousing, Software Engineering

Current Organizations Involved in the Center for Enterprise Architecture

<p>Alfabet, Germany Applied Research Lab/ Penn State Air Force Research Laboratory Armstrong Process Group Assoc. of Open Group Enterprise Architects (AOGEA) Association for Enterprise Information BAE Systems Inc Blue Cross Blue Shield Association Boeing Booz Allen Hamilton Business Architecture Guild Center for the Advancement of the Enterprise Architecture Profession (CAEAP) CIGNA Computer Aid Inc. (CAI) Computer Sciences Corporation Cutter Consortium DAGH,LLC Department of Homeland Security Data Management International (DAMA International) Defense Intelligence Agency Deloitte Consulting EMC Corporation Ernst & Young FEMA Forrester Research Gartner GEICO IBM Innoveer Solutions Integration Consortium Iteraplan, Germany International Organization for Standardization (ISO) Johnson & Johnson Kaiser Permanente</p>	<p>Kingdee Research Institute, China LMI Lockheed Martin Meraka Institute, South Africa NetApp Northrop Grumman Object Management Group (OMG) Oracle PA. State System of Higher Education (PASSHE) Pfizer Pinnacle Business Group PNC Financial Services Group PricewaterhouseCoopers Progressive Insurance Raytheon Smartsphere PPM and EAM Solutions State Farm Insurance Company TATA Consultancy Services , India The Confiance Group The Enterprise Architecture Shared Interest Group from the Industry Advisory Council The National Defense University The MITRE Corporation The Open Group TONEX Trout Technologies Unisys Corporation U.S. Department of Defense U.S. Department of Interior U.S. General Services Administration (GSA) U.S. Office of Management and Budget (OMB) U.S. Air Force, Chief, Enterprise Architecture Division, Office of Warfighting Integration and CIO Verizon Telecom - Information Systems Virginia Information Technologies Agency Wipro Technologies</p>
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Overview of the Education Group

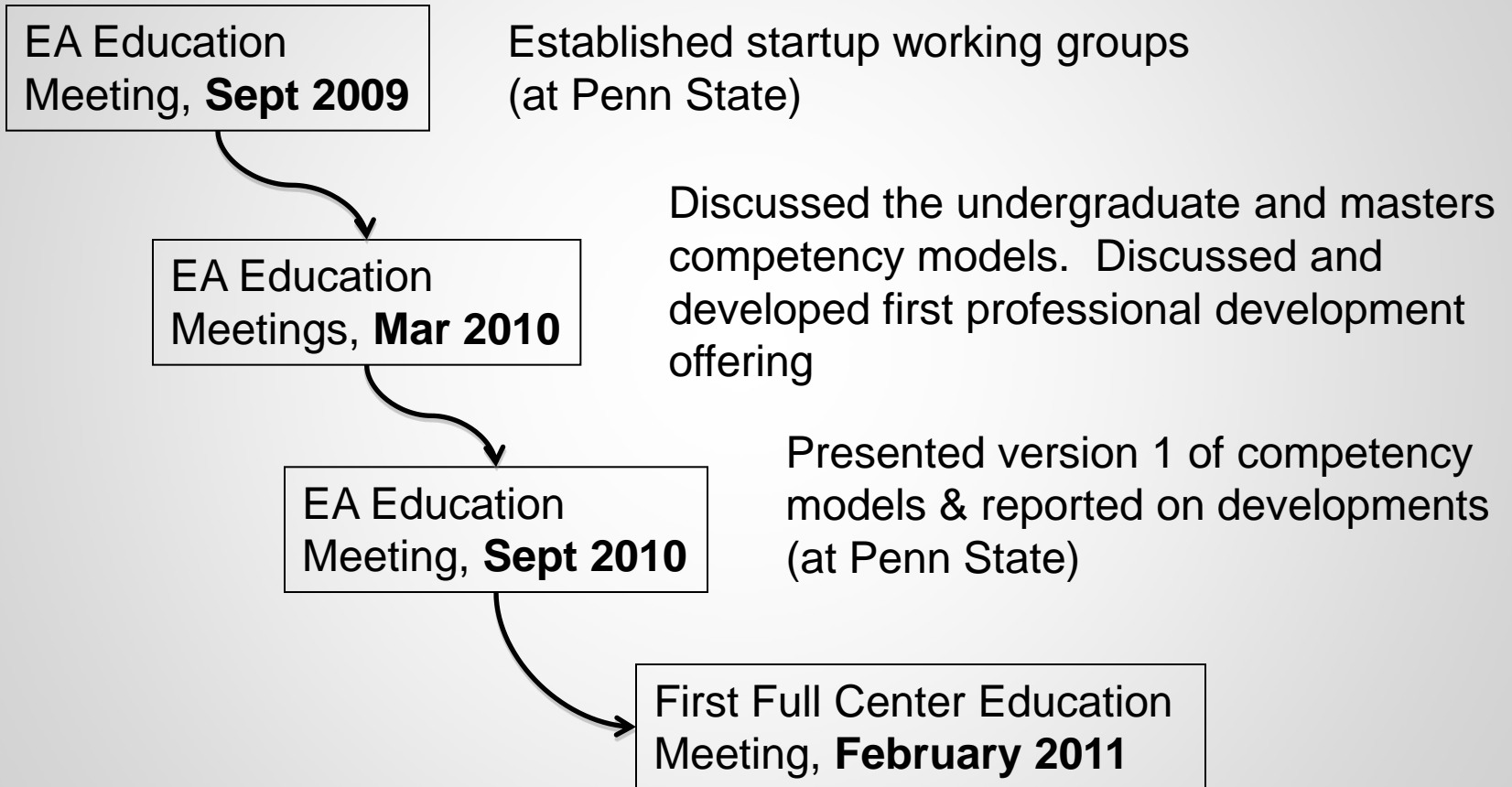
Our KPIs

- Key metrics for the education agenda:
 - Launch of the online EA professional masters program, and
 - Launch of an undergraduate focus area in EA and eventual joint undergraduate major with the College of Business, and
 - Development of a portfolio of professional development course offering.

Core Advisors

- Joe Tagliaferro, PwC
- Meg Giordano, Booz Allen Hamilton
- Rebekah Metz, Pfizer
- Alex Jeyschune, NetApp

The Road So Far



This Meeting

- Recognition: Jim Kennedy and CSC
- Key goals for this meeting
 - Update on educational initiatives current status
 - Revisit undergraduate and masters competency models
 - Discuss our objectives for this group going forward
 - Form initial working groups to address objectives
 - Discuss next steps and plan for the next EA education meeting

Behind the scenes

- Actively pushing the programs forward within the university
- Discussions with the Core Group

Our Agenda

- Discussion of undergraduate, masters, and professional development areas
- Update on research group meeting
- Formation into working groups and discuss objectives for each group
- Discuss next steps for each group and timelines

Overview of Current Status of Major Educational Initiatives

Undergraduate Educational Activities

- Development of first undergraduate EA fundamentals course
- Development of EA focus within current Enterprise Integration Curriculum
- Restart of Joint Major Discussions with College of Business Fall 2011/Spring 2012
- Many inquiries about the undergraduate program
- Five senior honors thesis projects in EA related areas
- EA video project
- Classroom speakers
- New EA student interest club

Undergraduate Educational Activities

- Developed the concept of the Women in EA working group to brainstorm ideas for attracting more young women to the profession (undergraduate education in particular)

Masters Educational Activities

- Approval of the Professional Masters Program in EA by the IST Graduate Advisory Council
- Master proposal working through various committees at Penn State
- Development of first online masters course
- Many inquiries about the masters program
- Virtual speaker video project

Professional Development Educational Activities

- Development and pilot of an EA Fundamentals Certificate Course
- Discussions on possible follow-on courses
- Discussions on possible executive education courses and partnerships

Federation of Enterprise Architecture Professional Organizations (FEAPO)

FEAPO an association of worldwide professional organizations whose members have an active interest in the practice and professionalism of Enterprise Architecture (EA). The purpose of FEAPO is to provide a forum to discuss cross organizational activities to standardize, professionalize, and otherwise advance the discipline of Enterprise Architecture.

The list of organizations involved in FEAPO is growing to be international and currently includes:

- **Data Management International (DAMA International) & DAMA International Education and Research Foundation**
- **International Council on Systems Engineering (INCOSE)**
- **International Organization for Standardization (ISO)**
- **The Association for Enterprise Information**
- **The Association for Open Group Enterprise Architects**
- **The Association of Business Process Management Professionals International**
- **The British Computer Society**
- **The Business Architecture Guild**
- **The Business Architects Association**
- **The Canadian Information Processing Society (CIPS)**
- **The Center for the Advancement of the Enterprise Architecture Profession**
- **The Enterprise Architecture Shared Interest Group from the Industry Advisory Council**
- **The Global IT Community Association (GITCA)**
- **The Integration Consortium**
- **The International Federation for Information Processing International Professional Practice Partnership (IFIP IP3)**
- **The International Professional Enterprise Architecture Consortium (IPEAC)**
- **The National Association of State CIOs**
- **The Network Professional Association (NPA)**
- **The Object Management Group**
- **The Open Group**

MITRE, Gartner, Forrester, and Cutter are functioning as external advisors during the startup process and input is also being provided from the Office of the Federal Chief Enterprise Architect, The National Defense University, and Federal CIOs.

Questions/Discussion