

Affiliations	Research Associate, Graduate School of Business and Public Policy, Naval Postgraduate School, Lecturer, Department of Technical Communication, University of Washington Lead Researcher, SalemSystems
Education	M.S. Technical Communication, University of Washington, (1997) B.A. Psychology, University of California, (1978, Magna Cum Laude)
Areas of Interest	Technology Adoption & Organizational Change Participatory Design Strategic Communication & Organizational Effectiveness
Presentations & Publications	Walsh, W. , Hocevar, S., Salem, A., Englehorn, L. (2013) "Industry and Public Sector Cooperation for Information Sharing, Oakland Airport." Technical Report by the Multimodal Information Sharing Team, Washington, DC. Sponsor: <i>Department of the Navy &amp; ODNI.</i> Salem, A., Hocevar, S., Walsh, W. , Englehorn, L. (2013) "Industry and Public Sector Cooperation for Information Sharing, Oakland Seaport." Technical Report by the Multimodal Information Sharing Team, Washington, DC. Sponsor: <i>Department of the Navy &amp; ODNI.</i> Salem, A., Hocevar, S., Walsh, W. Englehorn, L. (2012) "2008-2012 Video Highlights of Findings." Video Report by the Multimodal Information Sharing Team, Washington, DC. Sponsor: <i>Program Manager Information Sharing Environment.</i> Salem, A., Stames, P. (2012) "Implementing a Strategic Planning Process at the Naval Safety Center." A study of current practices and beliefs impacting the strategic planning process. Sponsor: <i>Naval Safety Center and Center for Executive Education.</i> Salem, A., Hocevar, S., Walsh, W. Englehorn, L. (2012) "2008-2012 Video Report of Findings." Narrated Report by the Multimodal Information Sharing Team, Washington, DC. Sponsor: <i>Program Manager Information Sharing Environment.</i> Salem, A., Hocevar, S., Walsh, W. Englehorn, L. (2012) "Industry and Public Sector Cooperation for Information Sharing, <b>Baltimore.</b> " Technical Report by the Multimodal Information Sharing Team, Washington, DC. Sponsor: <i>Program Manager Information Sharing Environment.</i> Salem, A., Walsh, W. (2011) "Industry and Public Sector Cooperation for Information Sharing, <b>Boston.</b> " Technical Report by the Maritime Information Sharing Taskforce, Washington, DC. Sponsor: <i>Office of the Director of National Intelligence.</i>

- Salem, A., Walsh, W. Englehorn, L. (2010) "Industry and Public Sector Cooperation for Information Sharing, **Delaware Bay**." Technical Report for the Maritime Information Sharing Taskforce, Washington, DC. Sponsor: *Office of the Director of National Intelligence*.
- Salem, A., Walsh, W. Englehorn, L. Englehorn, L. (2010) "Industry and Public Sector Cooperation for Information Sharing, **Honolulu**." Technical Report for the Maritime Information Sharing Taskforce, Washington, DC. Sponsor: *Office of the Director of National Intelligence*.
- Salem, A., Walsh, W. Englehorn, L. (2009) "Industry and Public Sector Cooperation for Information Sharing, **Puget Sound**." Technical Report for the Maritime Information Sharing Taskforce, Washington, DC. Sponsor: *Office of the Director of National Intelligence*. and *MARAD*
- Salem, A., King, C., Fox, S., Haley, R., Klotzback, M. (2009) "Best Practices in the Navy's Energy Programs." Technical Report for the *Department of the Navy*, Washington, DC.
- Salem, A., Walsh, W. (2008) " Industry and Public Sector Cooperation for Information Sharing, **LA-LB**". Technical Report for the Maritime Information Sharing Taskforce, Washington, DC. Sponsor: *Department of the Navy*.
- Salem, A., King, C. (2008). "The Interview as Participatory Problem Solving" Paper presented at the *2008 Association for Business Communication*, Lake Tahoe, CA.
- King, C., Candreva, P., Salem, A. (2008). "Preparing for Transition: Strategic considerations for the Business Transformation Agency" Technical Report for the *Department of Defense*, Washington, DC.
- Salem, A., King, C., Boyd, S., Kleimann, S., Simonds, K., Rose, E. (2007). "Beyond ROI: UCD as a catalyst for organizational change." Workshop presented at the *2007 Usability Professionals Association Conference*, Austin, TX.
- Salem, A., Boyd, S., & Rose, E., (2007). "User-Centered Architecture: Fast, Cheap, and Data Driven." Presentation at the *2007 Usability Professionals Association Conference*, Austin, TX.
- Salem, A. (2006). "Quick Starting UCD: Managing the Change." *IEEE Professional Communication Newsletter*, Volume 50, # 11.
- Salem, A. (2003). "Dialogic Probing: Interviewing for Product Research." Presentation of research methods at the *University of Washington*, Seattle, WA.
- King, C., & Salem, A. (2003). "Dialogic probing: Collaborating versus information retrieval in interviews." Paper presented at the President's Panel at the *2003 annual conference of the Northwest Communication Association*, Coeur d'Alene, ID.
- Salem, A. (2003). "Conceptual Modeling: Anything is Possible." Presentation on rapid methods for turning research findings into design artifacts at the *University of Washington*, Seattle, WA.

## Invited Presentations

- Salem, A., S., Walsh, W. 2013. "Multimodal Information Sharing Team (MIST) Presentation of Findings." Area Maritime Security Committee, San Francisco, CA.
- Salem, A (2012). "Multimodal Information Sharing Team: A Summary Report ". Harbor Safety and Area Maritime Security Conference, Pittsburgh, PA.
- Salem, A., King, C. (2007). "Beyond ROI: UCD as a catalyst for organizational change—Results from the workshop." Paper presented at *ACM BayCHI Usability Engineering* meeting, Mountain View, CA.
- Salem, A. (2007). "Customer Driven Design: Aligning Business Goals and User Need." Workshop presented at the *Association for Business Communications*, San Antonio, Texas.
- Salem, A. (2006). "Hurricane Katrina, Technical Communication, and You." *Closing session for the Society for Technical Communication Annual Conference*, Las Vegas, NV.
- Salem, A., Perrin, L. (2003). "UCD & Content Management: A Case Study of Organizational Adaptation." Presented for the *Puget Sound ACM Computer-Human Interaction Group*, Seattle, WA.
- Meads, J., Salem, A., Potosnak, K. (2002) "Where's the Design in Usability." Panel presentation on integrative methods for the *Puget Sound ACM Computer-Human Interaction Group*, Seattle, WA.
- Salem, A., Carlevato, D., Becker, K. (2000). "Three Faces of Ease: Analysis, design, and testing." Panel presentation on moving from analysis to design for the *Northwest Library Association*, Microsoft, Redmond, WA.
- Brody, R., Salem, A. (1999). "Instituting Usability Processes at Your Organization." Presentation on transitioning management for the *Ecommerce Consortium*, Bellevue, WA.

## Teaching

- University of Washington, Department of Technical Communication
- TC 318: Survey of User Experience Design (2002-2005)*  
Undergraduate course integrating qualitative research and system design.
- TC 518: User-Centered Design (2003)*  
Graduate course in design research methods.

## Short Courses

- Effects, Metrics and Risk (2009-present)*. Center for Executive Education.  
Facilitated workshops on strategic planning for Navy and DoD leadership.
- Strategic Communication (2009-present)* Center for Executive Education.  
Facilitated strategic communication planning for Navy and DoD leadership.
- Navy Leadership Courses*. Center for Executive Education. 2010-present  
Coached Navy leadership in improving communication and management skills.
- Innovation Workshops*. Center for Executive Education 2011  
Taught a short course on innovation through contextual design

*Building Capacity in Strategic Communication (2010 with G. Thomas)*  
Presenting theories of strategic communication and facilitating the self-design of their strategic communication efforts.

*Participatory Problem Solving: Interviewing Techniques for Qualitative Research*  
Presenting a model for interviewing that positions the research as participatory problem solving.

*Research Methods: Field Studies and Contextual Interviewing*  
Exploring methods for studying people in context—working, living, playing.

*Writing Simply: Designing for Use*  
Offering tools and techniques for clear writing that focuses on audience goals and plain language.

*Information Architecture: Audience Needs and Access Structures*  
Presenting methods for researching audience needs and developing information architectures based on those needs.

*System Design: User Research, Participatory Design, and Conceptual Modeling*  
Presenting a process for defining human system requirements based on direct input from system users.

## Service

Board Member, Marina Technology Cluster, Marina, CA (2005-current)

Board Member, Family Thrive, Marina, CA (2007-2009)

Board Member, Assoc. for Professional Communication Consultants (2007)

Board Member, Puget Sound Computer-Human Interaction (2003-2005)

Volunteer, American Red Cross, (2001-current)

## Professional Experience

### History

Research Associate, Naval Postgraduate School (2008-current)

Design Researcher, SalemSystems (1997-current)

Communications Researcher/Engineer, University of Washington (1992-1997)

## Focus

Looking at issues of strategic communication and change management, my work is focused on exploring the socialization of new processes, policies, and technologies. Using design research methods, I work with organizations to understand human system needs, align business systems with the organization's and practitioner's goals, and provide methods for defining, measuring, and tracking outcomes. Design research is cross-disciplinary, iterative, and is directed at influencing the design of new systems and processes. Because it focuses on systemic needs and includes direct input by practitioners, design research increases innovation and improves the sustainability of organizational reforms. Design research methods include rapid ethnographies, contextual interviewing, business and process analysis, user and task analysis, customer and user segmentation, collaborative research, field testing, and participatory design.

## Sponsors

<i>AT&amp;T Wireless</i>	<i>Getty Images</i>
<i>Anthrotech</i>	<i>HTC (Cingular/T-Mobile/ Verizon)</i>
<i>Bill and Melinda Gates Foundation</i>	<i>Home Grocer</i>
<i>Business Transformation Agency (USDOD)</i>	<i>Marina Technology Cluster</i>
<i>Chase Bobko</i>	<i>Maritime Administration (USDOT)</i>
<i>Center for Executive Education (NPS)</i>	<i>Med Data</i>
<i>Cisco Systems</i>	<i>Microsoft</i>
<i>City of Bellevue</i>	<i>Naval Safety Center</i>
<i>City of Seattle</i>	<i>Office of Director of National Intelligence</i>
<i>Department of the Navy</i>	<i>PM Information Sharing Environment</i>
<i>Design for Context</i>	<i>Sony Europe</i>
<i>Office Director National Intelligence</i>	<i>State of Washington</i>
<i>Family Thrive</i>	<i>University of Washington</i>

## Key Projects

As a communication researcher, my projects are focused on issues related to technology adoption, organizational change, and strategic communication. Projects incorporate systems research, product and organizational design, and usability.

### **Technology Adoption, Organizational Change, and Strategic Communication**

Focus is on the organizational impact of new technologies and processes.

#### *Bill & Melinda Gates Foundation*

Examined staff adoption of internal communication systems and their relationship to work practice.

#### *Business Transformation Agency (DoD)*

Researched internal perceptions and presidential candidates positions on the value of business transformation efforts within the DoD.

#### *Department of the Navy (DoD)*

Researched social and organizational issues impacting conservation behaviors in the tactical forces of the U.S. Navy.

## Key Projects

### *JDSU*

Researched customer and internal stakeholder needs for improving product usability and increasing market share.

### *HomeGrocer.com*

Introduced design research methodologies into market research process.

### *Maritime Information Sharing Taskforce*

Developed and managed a process for improving the sharing of security information at maritime ports across the United States.

### *Seattle Emergency Management (SPU)*

Researched the organizational structure and effectiveness of the emergency management department.

### *Seattle Police Dept.*

Studied the environmental, social, and personal factors involved in the use of mobile technologies by first responders.

### *Seattle Public Utilities*

Conducted a needs analysis and helped develop processes for reforming web communication strategies.

### *Seattle Public Utilities*

Conducted a feasibility study and change impact report for the adoption of a knowledge management system.

### *University of Washington*

Studied the impact of educational technologies on engineering education.

### *Washington Department of Information Services*

Conducted strategy research on a project looking at instituting a statewide information standard.

### *Washington Department of Social & Health Services*

Analyzed resource and adoption criteria for implementing a change in information systems development.

### *Washington Department of Labor and Industries*

Mentored staff in design research practices and researched organizational adoption of new development practices for information systems.

## **Systems Research and Design**

Focus: systemic issues critical to the introduction of new products and processes.

### *Joint Forces Command*

Facilitated the design of a internal strategic communication processes.

### *AT&T Wireless*

Conducted ethnographic research of call center operations to improve worker efficiency.

### *Bill & Melinda Gates Foundation*

1. Researched the organizational strategies and constraints of proposed reforms in the delivery of advocacy communications. 2. Researched brand implications of the Foundation's underlying structure.

### *Cisco Systems*

Instituted empirical methods for researching, designing and evaluating mobile communication systems.

### *City of Bellevue*

Developed a process for vendor management that enforced quality metrics.

### *MedData*

Studied the organizational impact and information needs of emergency medicine billing and coding processes.

### *University of Washington*

Conducted iterative research and design related to the adoption of “smart” classrooms by university faculty.

### *Various*

Helped develop the product strategy for web applications and services.

## Key Projects

### **Human Factors & Usability**

Focus: human performance issues associated with the use of information and technology systems.

### *HTC (Verizon, Cingular, T-Mobile) and others*

Performance evaluations of smart phones and mobile computing.

### *Seattle Public Utilities & Cisco Systems*

Initiated fast track research and design of information and communication systems.

### *University of Washington*

Usage and business needs analysis of educational media facilities.

### *University of Washington Library & Getty Images*

Field studies, product testing, and information design of digital image libraries.

## Results

Design research increases innovation, improves business processes and empirically measures success, resulting in:

### **Grounded innovation**

- Systemic approach to problem solving and ideation
- Alignment of processes and technologies with real world activities
- Reduced risk through an iterative research/design process

### **Process improvement**

- More effective, efficient, and satisfying systems
- Greater acceptance of new technologies and processes

### **Measurable success**

- Key outcomes drive decision making
- Progress and impact are measured empirically