Collaboration Software Acceptance Patterns

AN EXPLORATORY STUDY OF A HOMEOTECHNIC BUSINESS SCHOOL ADVISORY BOARD

Purpose of this Presentation

This presentation will provide an overview of advisory board development utilizing a homeotechnic framework for encouraging collaboration, technology acceptance, and effective board development

Statement of Problem

- The emergence of collaborative software or groupware has significantly effected the interpersonal relationships of organizational members.
- Homeotechnic groups have created new levels of interdependence and established new criteria for group membership and participation.
- Failure to effectively design, develop, and implement collaborative technology can diminish technology acceptance in homeotechnic groups and impede enhancement of productivity.

Purpose and Significance of the Study

- **Examining collaboration software acceptance patterns**
- **Increasing the understanding of the human-technology interface and the implications for organizations**.
- Exploring the evolving **merger between the technical and behavioral disciplines**.

Terminology

Homeotechnic Group: Any number of individuals forming a recognizable unit as defined by a common affiliation through a single technology, e.g., computer software. (Williams, 1997)

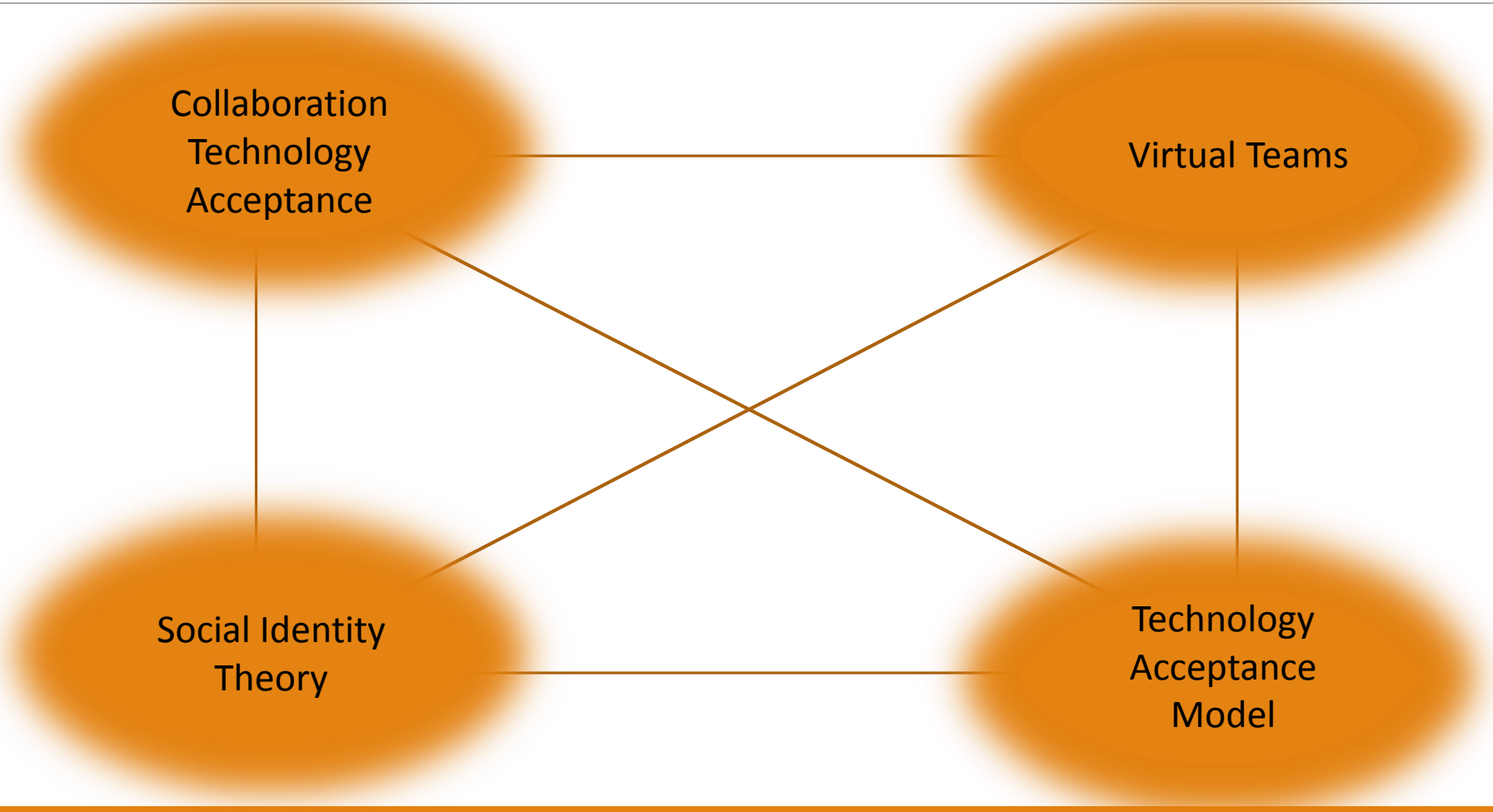
Collaborative Software or Groupware: An application software designed to help people involved in a common task to achieve goals. (Johnson-Lenz, 1990)

Technology Acceptance Model: An information systems theory that models how users come to accept and use a technology. (Davis, 1989)

Techno-psychology (organizational): An emerging area of knowledge regarding the mental and behavioral characteristics of humans associated with the development and use of technology. (Williams, 1997)

Huddle: The Huddle software platform provides cloud-based file sharing, file storage, content management, collaboration, task management, discussion boards, and more.

Literature

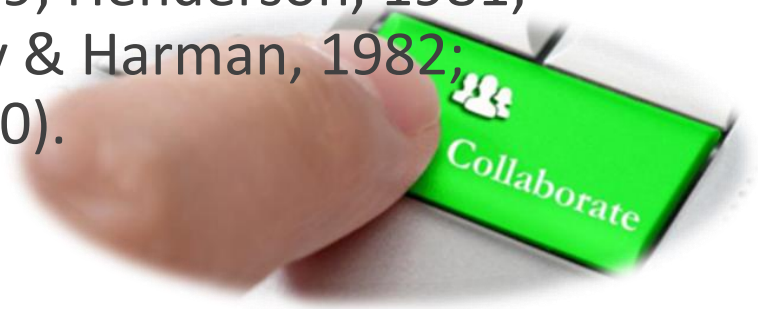

Collaboration Technology Acceptance
Virtual Teams
Social Identity Theory
Technology Acceptance Model

Collaboration Software Technology

Groupware (Johnson-Lenz, 1980, 1981a, 1982). Robert Johansen's book on groupware for business teams. (Johansen, 1988)

Business, Education, and Personal Interaction via Computer (Nilles, Carlson, Gray & Hanneman, 1976; Hiltz & Turoff, 1978; Johansen, Vallee & Spangler, 1979; Toffler, 1980; Hiltz, 1984; Wright, 1990), collaborative technology theories have taken center-stage.

The Fundamental Restructuring of Society (Fuller, 1969; Meadows, Meadows, Randers & Behrens, 1972; Schumacher, 1973; Roszak, 1979; Henderson, 1981; Hawken, Ogilvy & Schwartz, 1982; Naisbitt, 1982; Markley & Harman, 1982; Harman, 1988; Naisbitt & Aburdene, 1990; Theobald, 1990).



Social Identity Theory

Henri Tajfel and John Turner (Tajfel, 1878, 1981, 1982: Tajfel and Turner, 1979; Turner and Giles, 1981).

Karl Marx and Emile Durkheim (James, 1890; LeBon, 1895, translated 1947; Mead 1934)

Technology Acceptance Model

Technology Acceptance Model - Davis

Theory of Planned Behavior - Taylor and Todd (1995).

Technology Assistance Model - Venkatesh and Davis (2000)

Unified Theory of Acceptance and Use of Technology (UTAUT) Model - Venkatesh et al. (2003)

Research Questions

- **Research Question 1**: What collaboration software acceptance patterns emerge within a business school advisory board?
- **Research Question 2:** What interventions influence collaboration software acceptance patterns business school advisory board?
- **Research Question 3:** What are the most valuable collaboration software functions for a business school advisory board?
- **Research Question 4:** What are the settings in which collaboration software acceptance conversations occur among business school advisory board members?

Setting: The University and College

Coppin State University - …a comprehensive urban university of higher learning with programs in the liberal arts, sciences, business, and disciplines

College of Business: 1st Degree Awarded: 1988 BS Management Science

Departments: 1. Dept. of Accounting and Information Systems, 2. Dept. of Management and Marketing, 3. Dept. of Sport and Entertainment Management

Degree Offerings: Bachelor of Science degrees in Accounting, Management, Marketing, Management Information Systems, Entertainment Management, Sport Management

Setting: The Board

Mission: The Coppin State University College of Business Advisory Board supports the Office of the Dean by making strategic recommendations, coordinating activities, and facilitating progress on issues that significantly influence the success of the College's mission and vision

Vision: The Coppin State University College of Business Advisory Board envisions an effective, diverse body of business and community leaders who achieve 100% of their strategic objectives relating to the continuous improvement of business education and the value provided for College of Business stakeholders.

Members:

Member 1 – State-Level Public Official

Member 2 –Bank President (Retired)

Member 3 –Financial Services Executive (Retired)

Member 4 – CEO & President of a Media Company

Member 5 – CEO & President of an Information Technology Company

Setting: Board Responsibilities

- **Make recommendations** regarding the on-going review of the College's long-term planning and special initiatives. Represent the interests and needs of external constituencies to the College
- **Communicate, endorse and advocate** the College's interests to external constituencies and raise its profile as a leading provider of business education, engendering support and understanding of its goals.
- **Assist the College in meeting its financial development objectives**, through direct participation in the identifying and cultivating of significant forms of support from individuals and organizations.
- **Acts as a sounding board** to the dean on issues pertaining to the advancement of the College and the achievement of its vision.

Methodology

- Analytic Induction and Case Method
- Data Sources
- Data Collection Methodology
- Data Analysis

Analytic Induction Eight Step Process

- **Defining the research question (possibly priori constructs)**
- **Selecting an appropriate population**
- **Crafting data collection instruments and protocols**
- **Entering the field**
- **Analyzing data**
- **Shaping hypotheses by measuring constructs and verifying relationships**
- **Enfolding literature by examining literature which conflicts with the emergent theory**
- **Reaching closure through theoretical saturation (if possible)**

(Eisenhardt, 1989)

Minimizing Researcher Bias

Internal Validity

External Validity

Reliability

Triangulation

Data Collection Methods

Participant observation

Direct observation

Interview

Documentation Analysis

Data Sources (Virtual and Live Acceptance Exchanges)

Meetings

Informal Conversations

Documents

Technology Acceptance Model Questionnaire Results

Data Collection Method Per Question

	Participant Observation	Observation	Interviews	Document Analysis	TAM Questionaire
What collaboration software acceptance patterns emerge within a business school advisory board?	X	X	X	X	X
What interventions influence collaboration software acceptance patterns business school advisory board?	X	X	X		
What are the most valuable collaboration software functions for a business school advisory board?	X	X	X		X
What are the settings in which collaboration software acceptance conversations occur among business school advisory board members?	X	X	X		

Data Analysis (Chain of Evidence, Analysis, & Reporting)

	Participant Observation & Observation	Interviews	Document Analysis	TAM Questionnaire
Step 1	Analyze and code for general themes by raising questions and giving provisional answers about categories and their relations.	The products of interviews will be recorded or logged, and/or transcribed	Available documents will be gathered, e.g. reports, memorandums, written requests, electronic mail messages, etc.	Reponses will be recorded and categorized
Step 2	Logs will be examined until a general state of theoretical saturation occurs, and further analysis fails to uncover anything new about the category.	The recordings will be played to identify broad themes.	Documents were analyzed to identify broad themes.	
Step 3	Theoretical memos will be maintained throughout the process.	The audio transcripts will be analyzed to formulate categories or groupings that are: a) exhaustive, including all relevant items, and b) mutually exclusive, so that no item can be coded in more than one category.	Documents were analyzed a second time to formulate categories or groupings that are: a) exhaustive, including all relevant items, and b) mutually exclusive, so that no item can be coded in more than one category.	
Step 4	Sorting and integrating the theoretical memos will continue throughout the process leading up to the corroboration with other methods of data sources and writing of the research report.	The results of steps 1 through 3 will be analyzed and interpreted by: a) Summarizing the coded data, b) identifying patterns and relationships within the data, c) developing hypotheses about the patterns and relationships, and d) relating the results to data obtained from other methods or situations or assessing the validity of the analysis.	The results of steps 1 through 3 were analyzed and interpreted by: a) summarizing the coded data, b) revealing patterns and relationships within the data, c) developing hypotheses about the patterns and relationships, and d) relating the results to data obtained from other methods or situations or assessing the validity of the analysis.	