Designing, Managing, and Sustaining Virtual **Academic Collaborations** Effectively and Effectively with VOSS-Virtual Organization Socio-technological Systems





Presenter: Gerry Hanley Ph.D. MERLOT, SkillsCommons, and CUDA

Co-authors: Sowjanya Dharmasankar, Gayathri Chockalingam, Kavitha K, Shalini C, Subbu Lakshmi

Job Skills Development Center, India



April 3, 2025

Online Learning Consortium & MERLOT INNOVATE Conference



Agenda

- What is VOSS
- Case Studies
 - MERLOT
 - Job Skills
 Development Center
- Implementing Principles
- Recommendations for Effective VOSS

WHAT IS VOSS – Virtual Organization Socio-Technical System?

Virtual organizations operate in digital environments, relying on a technology infrastructure of digital content "libraries," multimedia, synchronous and asynchronous communication tools, and "apps" that help members of the organization manage their interactions, operations, and outcomes.

The technology infrastructure provides the capacities to support virtual organizations' functions

But it is the people who have the capabilities to use the technologies to manage their collaborative efforts.

As socio-technological systems, virtual organizations encompass both the social aspect (people, roles, and relationships) and the technical aspect (technology and processes).

VOSS is all about COMPLEX SYSTEMS

The VOSS approach acknowledges the interplay between:

- The organization's social structure, including stakeholders (employees, management, customers, suppliers, etc.),
- Management policies and processes (human resources, business administration, marketing and sales, facilities management (technology access, security, networks, etc.),
- Enterprise marketplace (competitors, collaborators, cultural and social organizations, etc.) and
- The technology infrastructure and services (information management and communication technology software, hardware, and IT management tools and procedures).

Case Studies of Success VOSS

MERLOT.org: 28 years of a continuously growing 200,000+ member community building:

- A 100,000+ library of free and open educational resources open to all
- A 2,000+ collection of open educational practices for sharing "know-how"
- A set of open educational services enabling MERLOT community to freely create, curate, evaluate OER as well as reuse, revise, remix, retain, and redistribute OER.

Job Skills Development Center: A 3-year-old organization working in rural India's state of Tamil Nadu to develop the skills, knowledge, and mindsets of women to work in and grow virtual environments that support sustainable living wages.

MERLOT-A Walk Through The Vineyard

The People

- Members
- Editorial Boards
- Partners
- Leadership Team



The Technologies

- Libraries of Materials
- Portals for Purposes Communities and their collections
- Services giving agency to members
 - Authoring OER
- Video Conferencing
- Google "Office"

The MERLOT Community Mission

 Putting Innovations Into Practice with Affordable Learning Solutions

How MERLOT's VOSS Works (Part 1)

Technical Infrastructure is the "easy" part

Socio-technical systems are more difficult

- Understanding the un-met needs of your community
 - Communication with users is essential
 - Monitoring user behavior provided evidence of what is working and not working.
- Design solutions that are easy to learn, easy to use, effective, and enjoyable
 - USABILITY IS KEY
 - Collaborative design processes + usercentered design processes are essential.
- Organizational structures need to align with design solutions

How MERLOT's VOSS Works (Part 2)

Organizational Structure

- Flat organization with community agency
- Defined Roles and Responsibilities of Staff & Volunteers

Communication Structures

- Representative leadership and reliable meetings
- Low burden communication technologies (schedule, length, preparation)

Management and Planning Processes

- Strategic and operational planning
- Project management
- Change management
- F'ing management

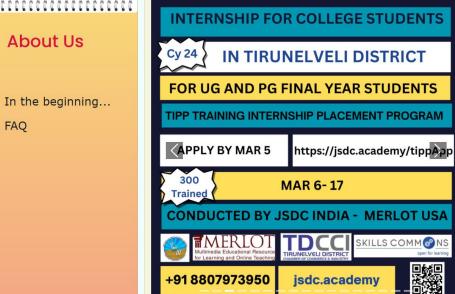
Financial Structure

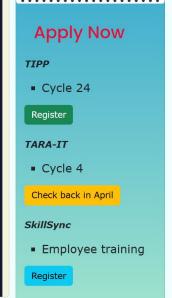
- No/low burdens on the member and leadership community
- High burdens on Executive

LEADERSHIP That Leads with the "HEART"- Mission Passionate!

Job Skills Development Center https://jsdc.academy/







Job Skills Development Center Programs

TIPP- Training Internship Placement Program

TARA IT – <u>Technology Talent Transformation Program</u>

How JSDC's VOSS Works (Part 1)

- Technical Infrastructure is the "easy" part
 - Website supported by Nellai Consulting Private Limited
 - Zoom for virtual meetings
- Socio-technical systems are more difficult
 - A study of local business needs & assessment of skills gap led to TIPP curriculum which provides both the workplace training and internship opportunity.
 - A global team of mentors provides training and opportunities for remote and onsite work.
 - MOU with the district Chamber of Commerce (and all their industry partners) created pipeline for internships and employment.

Vembu- founder of Zoho- said ,"if skilled no graduate needs to leave home"

TARA ITPutting TIPP Skills into IT Practice









Project Based learning





DISCUSSIONS



WEBSITE DESIGNING



IMPLEMENTATION

Job Skills
Development
Center:
Mission
Passionate

Providing women with economic "power" results in many consequences that empower them personally, socially, culturally, politically and financially. Reduces incidence of abuse by spouse and relatives / harassment/ dowry related harassment (dowry is abolished)

Employees who can communicate with customers and solve problems with business operations are highly valued.

Remote and back-end office work opportunities provide a means to blend one's cultural heritage with agency for contemporary careers.

Website designs that improve marketing and sales of local businesses changes the social and economic dynamics for the better for all.

TARA IT students work directly with clients to define requirements, consult on designs, and deliver on time.





CATEGORIES SERVICES PRODUCTS



93, Opposite L.I.C Bus Stop, Trivandrum Road, Palayamkottai, Tirunelveli, Tamil Nadu - 627 002.

ZENITH OPTICALS

(+91) 83 44 11 33 55

Monday - Saturday: 10:00 AM - 9:00 PM

Sunday: 10:00 AM - 7:00 PM



ABOUT US

"Clear Vision, Timeless Excellence."

Since 1950, we have been a trusted, third-generation optical store, now in Palayamkottai. We provide premium and budget-friendly eyewear for all vision needs. Our Computerised Eye Testing is conducted by qualified optometrists using the advanced NIDEK Autorefractometer, Japan.

BRANDS















https://www.d14dessertcorner.com/

Cakes Q **Order Now** Menu **About Us Contact Us** Search Filter by Category Customized Valentine's Day Cake ΑII Valentine's Day Cakes -4 Kids Cakes ₹2,400.00 Wedding Cake Customized Add to Cart Price Customized Cream Valentine's Day Cake

-2

Sort by

20

Customized

Valentine's Day Cake

-3

₹2,400.00

Add to Cart



Customized

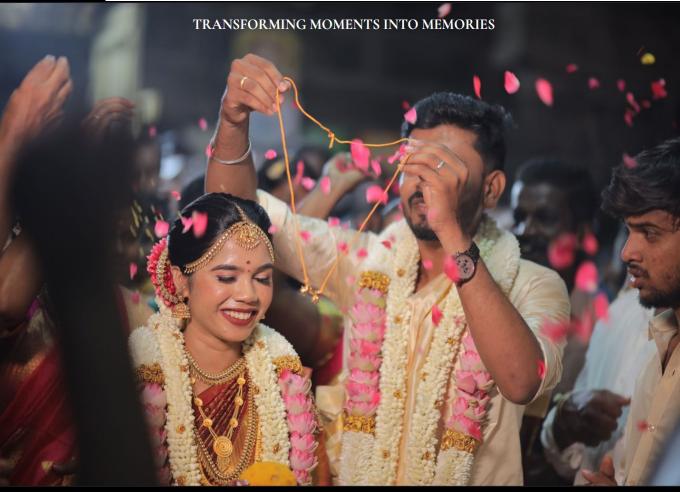
Valentine's Day Cake





WELCOME TO RAJAKUMARI ARTISTRY

Unique. Beautiful. Confident.



Engagement | Reception | Marriage | Baby Shower | Puberty | Pre/Post wedding Shoots | BirthDay | Model Shoots

BRIDAL PACKAGES

Signature/ Air Brush Look



Preparing Patients for Procedures Is CRITICAL for Business



SERVING WITH HUMANITY



Multislice CT

A computerized tomography scan, also called a CT scan, is a type of imaging that uses X-ray techniques to create detailed images of the body.

Get the details



Computed radiology

X-rays are a type of radiation called electromagnetic waves. X-ray imaging creates pictures of the inside of your body.

Get the details



About Us Services - Contact

Ultrasonography

Diagnostic ultrasounds use sound waves to make pictures of the body. Ultrasound, also called sonography, shows the structures inside the body.

Get the details

How JSDC's VOSS Works (Part 2)

Organizational Structure

- Flat organization with community agency from people around the world
- Transparency and team-led projects ensures knowledge sharing
- Successful students migrate to JSDC Leadership Team

Communication Structures

- Representative leadership and reliable meetings
- Training is provided on a hybrid platform with usable technologies

Management and Planning Processes

• Decentralized, democratic structure allows for decision making based on discussions leading to a greater impactful initiatives.

Financial Structure

- Cost is minimal for students. Reasonable pay for JSDC leaders
- The program is taught by volunteers and JSDC team.
- Executive Director responsible for revenue

LEADERSHIP That Leads with the "HEART"- Mission Passionate!

Emerging Principles of Functional and Sustainable Virtual Organizations...

Technologies:

• Simply Usable Video Technologies (e.g. Zoom) that enables the multidimensional aspects of communication and development of personal relationships.

Management Process:

 Shared governance in planning with personally accountable/ intrinsically motivated implementation of plans and strong Project & Changes Management

Leadership from the "Heart"

 The actions and words of leaders are always enthusiastically aligned with the organization's mission.

The Mission should "Give a Gift and Not A Burden"

• Gifts produce reciprocity in a community which sustains its energy for actions.







THANK YOU! QUESTIONS & COMMENTS?

gerry.hanley@csulb.edu

Except where otherwise noted, content in this presentation is licensed under a Creative Commons Attribution-Noncommercial-ShareAlike 4.0 International License

