Metadesign in Practice

An Alternative Service Delivery Methodology for the New Economy

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Presentation Overview

What is Metadesign
What are the Implications-Actions + Opportunities
Why an Alternative Approach and Why Metadesign

Engagement and Process
  Problem Identification
  Engagement and Connectivity
  Community and Education

Benefits to the Community, Architect and the Profession

Pilot Services Studies
Future Actions

Q + A
An Architect

• At every table.
• In every Boardroom.
• On every Council and Commission.
• We are the problem solvers and the keepers of the built environment.
• So how do we become relevant to those who don’t even know we exist?
• How do we stay at the forefront of the conversation?
What’s Next? What Now?
Metadesign

“The Power of Design
A Force for Transforming Everything

Richard Farson

Metadesign — a transcendent level of design that seeks to rectify fundamental problems by addressing the needs of all people…. If we have the courage to embrace design’s unrealized potential, there appears to be no limit to the role it can play in the future of civilization.”
Moriyama & Teshima Planners & Buro Happold in Joint Venture
Riyadh, Saudi Arabia

“Water purification might seem outside the purview of an architectural awards program, but the Wadi Hanifa Wetlands project is among this year’s most far-reaching in terms of planning and human amenity.” Architectural Record, 2/2011
- Write tomorrow's headline:
  “Architects....................”
- What is the biggest challenge facing your community, state, our profession?
Metadesign Is-

- A Transcendence of Regular Design Meeting a Set of More fundamental Problems.
- Architects, Designers, Social Scientists, and Community Answering the Needs of many:
  - Comparative to Public health in Medicine.
  - Health Safety and Welfare Meets Sustainability.
Metadesign Is-

- Beyond Just Solving Problems, but:
  - Design for the Public Good
  - to Create Social Value
  - to Address Quality of Life Issues
  - to do Better Work

- To address the needs of a global population that is suffering the dire consequences of a world of haves and have nots.

- From New Orleans to New Delhi
Why Metadesign for the Benefit of Architectural Profession?

- Engagement of Emerging Professionals.
  - New relationships based on collaboration not servitude.
  - New ways to get IDP credit while serving society.
- Engagement of Community
- Engagement of Society
- Recruitment into the Profession.
- Relevant to public, social and environmental issues.
Metadesign vs. Traditional Design

- Traditional Design has been relegated to the design of things that only the market will support.

Will the existing market based system work to reduce crime, educate at risk youth, take up the challenges of global poverty, make us healthier?
Metadesign vs. Traditional Design

• Traditional Contractual “Project” Delivery.

  Owner
  ↙
  Architect <--------> Contractor

• Integrated “Project” Delivery (IPD) as Promoted by the AIA (Contractual).
Metadesign vs. Traditional Design

Integrated “Service” Delivery (Contractual) based on Problem Solving Solutions by a Metadesign Team Approach.

Owner/Community
Not For Profits Foundations
Architects & Interns LA’s/Designers
Social Service AIA Foundation
Schools/Colleges/Universities

A coalition with a collaborative approach to Problem Solving with “projects” as a consequence.
Metadesign Will Be-

- A Special Designer deriving satisfaction from serving in answering such needs—such a design effort is Metadesign.
- Transcendent of regular design meeting a set of more fundamental needs on a social and global level.
- Is Metadesign the future design approach that will propel architects and all designers to the forefront of the business and social environment?
- Metadesign and the new markets based on sustainability.
Metadesign Rationale

- Create solutions for our environmental dilemma
- Resolve the impact of population and sprawling development.
- Promote sustainable community development.
- Promote environmental design, products and thinking (policy).
- Frame future policies and planning.
- Help communities implement sustainable objectives.
- Garner endorsement and support for design as a path to fundamental solutions.
Metadesign and New Markets based on Three Pillars of Sustainability

Environment | Economy | Social Equity
Three Pillars of Sustainability

Environment  |  Ecological Integrity

- Reduce  |  Reuse  |  Recycle
- Energy Innovation
- New Energy Codes
- Water  |  Design  |  BMP’s
- Air Quality
- Site  |  Land Use  |  Location
- Products and Materials
- Consumer and Client Education
Three Pillars of Sustainability

Economy | Laws + Incentives to Promote Green Design
Building Science and Education
Local Businesses
Green Businesses
Green Investments
Support Sustainable Planning Concepts
Urban Infill + Higher Densities
Three Pillars of Sustainability

Social Equity | Diversity
Equal Opportunity
Workforce Housing
Transportation Options
Affordable Housing
Accessibility + Education
Art + Cultural Support
Approach to Metadesign Rationale

- A transcendence of regular design approach and delivery, addressing a set of more fundamental problems.
- Asking the question ideally what problems should be addressed that would address the needs of the greater good?
- Beyond the usual team of designers.
- Architecture as a consequence of the solution.
Approach to the Metadesign Process

- Create Connectivity and Networking Systems-Connecting Your Constellations.
- Not for profits, Municipalities and Community as Team Members-not as the client.
- Promote Public/Community Design Process.
- Promote Projects-Defined by Bigger Challenges.
• Write tomorrow's headline:
  “Architects..................”

• What is the story your community really cares about?

"Those are the stories making news at this hour — Now, here are some stories nobody cares about...."
Process and Case Studies

• Ask the Big question
  – What, if could be accomplished, would resolve a myriad of challenges in your community?

• Connect the constellation
  – Who are the community stakeholders related to the question?

• Map the process-Community Programming
  – How do you get there from here?
DRI/TMCC Wind Program

• Ask the big question-What would make the Truckee Meadows Community College Renewable Energy Program the flagship for wind power in Nevada?
- Our world view includes being actively engaged addressing the problems of climate change, doing so in a socially, economically and environmentally sustainable for-profit manner.
- This means promoting projects that will benefit the community in a broad variety of areas.
- Creating a truly community based project.
First Class Training Equipment for Wind Tech Program

Demonstrates DRI Research Park’s commitment to the advancement of new technologies

Discounted Power per KW/h

An example to the Community

TMCC as the Wind Power Flagship for the State

National Prominence thru Senator Reid in the Renewable Industry

Provide industry leading research opportunities.
DRI/TMCC Wind Program-Stakeholders

Public Partners
- TMCC, DRI
- Dandini Research Park
- Senator Harry Reid’s Office
- Nevada State Office of Energy
- City of Reno
- DOE/Wind Powering America

Private Partners
- Richard Licata, FAIA
- Intern Associate Architects
- Architecture Students
- Great Basin Wind Partnership
- City National Bank
- GE Wind
- NV Energy
DRI/TMCC Wind Program-Performa

Estimated power production

- Assuming an annual average wind speed of 5.8 m/s at 80 meters and an annual average air density of 0.965.
- The 1.0 MW – 100m rotor projected production is 3200 mwh/yr.
- The 900kW - 80m rotor projected production is 1314 mwh/yr.
- Projected cost savings to institutions $400,000/yr.
- Estimated payback period 3 to 5 years.
DRI/TMCC Wind Program
Tahoe Gateway-8 Worlds of Tahoe

• Ask the question-How can vehicular trips be reduced in the Lake Tahoe basin while increasing tourism?
Sustainability Challenges
Based on UC Davis Research:
80% of the degradation of Lake Tahoe quality can be attributed to vehicular trips.

Lake Tahoe economy:
Failed economy based on a 1950’s model.

Deteriorating quality of life for local Tahoe residents.
Priced out of quality housing
Low paying jobs/high cost of living
Tahoe Gateway-8 Worlds of Tahoe- Stakeholders

Public Partners
- North Lake Tahoe PUD
- Placer County Redevelopment
- Senator Harry Reid’s Office
- TRPA
- University of Nevada
- Sierra Nevada college
- DOE
- Washo Tribe

Private Partners
- Richard Licata, FAIA
- Intern Associate Architects
- Architecture Students
- Sustainable Tahoe
- Tahoe Resort Association
- League to Save Lake Tahoe
- Tahoe Prosperity Plan
- Solar Sailor Craft
Tahoe Gateway-8 Worlds of Tahoe-Green Transportation

Possible transportation crafts Solar Sailor and individual monorail Sky Tran
A focus on Green Transportation Technology

Funding sources
- Grants
- Private Funding
- Revenue from fares
- Tourist Accommodation Taxes
- Federal Funds-Tax Set a side
Gateway Programming

• Based on a Monterey Bay Aquarium Model
• A blend of water science, event center, an example of green building; an iconic community image.
Gateway Programming

• Interactive learning, community events, and a source of pride serving as a “Gateway” to the 8 Worlds of Tahoe.
Mapping Strategies

8 WORLDS TIMELINE

Green Transportation
Concluding Steps - Next Steps

• Engagement Emerging Professionals
• Ask Big Questions
• Connect your stars
• Tell your story