

US EPA ARCHIVE DOCUMENT



LIFT Technology Evaluation Program

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Water Environment Research Foundation (WERF)

U.S. EPA Water Technology Innovation Cluster Leaders Meeting
“Successfully Supporting Early-Stage Companies: The Role of Technology Testing”
March 24-26, 2014 | Cincinnati, Ohio

What Is LIFT?

A WEF/WERF Initiative
Accelerating Innovation
Into Practice



LIFT Program Components

1. Technology Evaluation Program

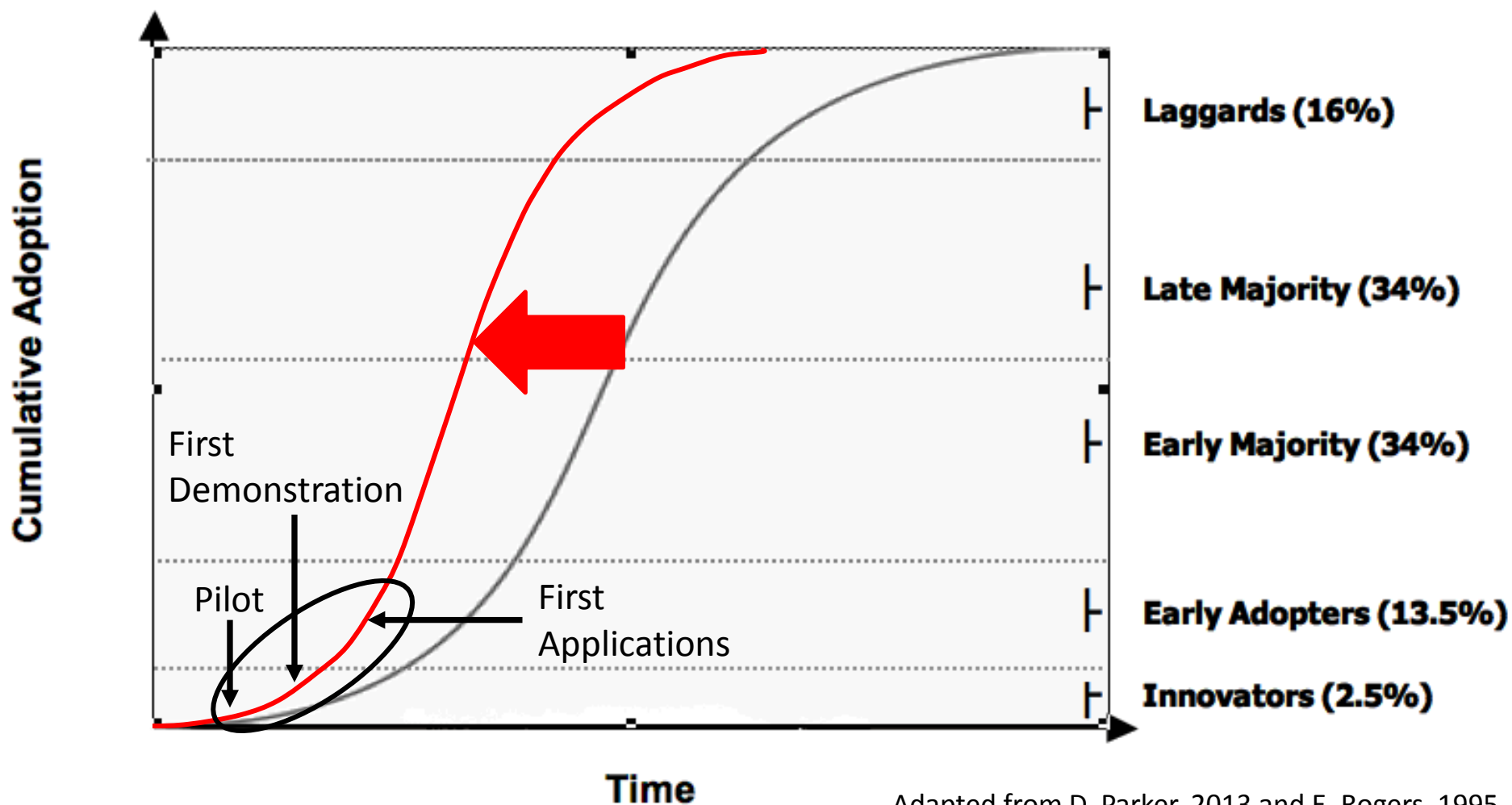
2. People and Policy

3. Communication

4. Informal Forum for R&D
Managers



Focuses on New Technologies



Adapted from D. Parker, 2013 and E. Rogers, 1995

End User Driven



LIFT Working Group:

- Initially about 25 facility owner members, currently about 250+ members

VEP (Volunteer Experts Pool):

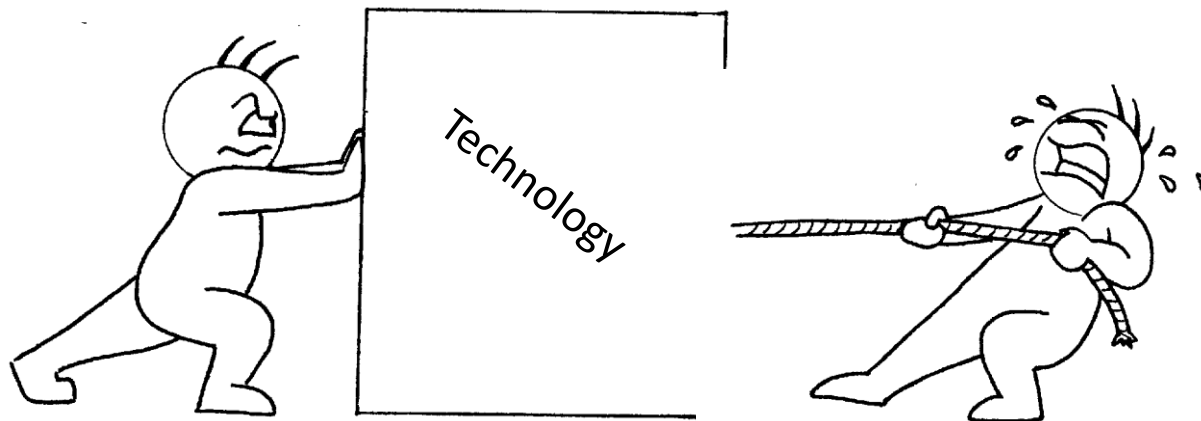
- Established for non-facility owners including consultants, academics, equipment manufacturers, etc.

Technology Evaluation Program Benefits

- ☐ Credible, well-documented vetting system to screen new technologies and processes
- ☐ Ability to more rapidly deploy new technologies and remove existing impediments
- ☐ Mitigation of risk and cost of innovative technology deployment through partnerships
- ☐ Facilitation of collaboration among facilities for the evaluation and testing of new technologies
- ☐ Peer-reviewed information about innovative technologies

LIFT Process

Technology Push and...



...Technology Pull

LIFT Technology Scans

- Identify and evaluate innovative technologies
- Provide platform for vendors to introduce technologies
- Facilitate collaboration on tech testing & demos
- Pilot launched Nov. 2013
 - Digestion Enhancements
 - Thickening & Dewatering
 - 28 New Technology Submittals



LIFT Technology Scans

- Steps:
 - LIFT Call for Innovative Technologies
 - Providers Submit Applications
 - Expert Panel Review
 - Technology Provider Forums
 - Assessment by Interested Parties
 - Collaborative Pilots/Demos/Testing
 - Results/Data Sharing



What LIFT Is and Is Not

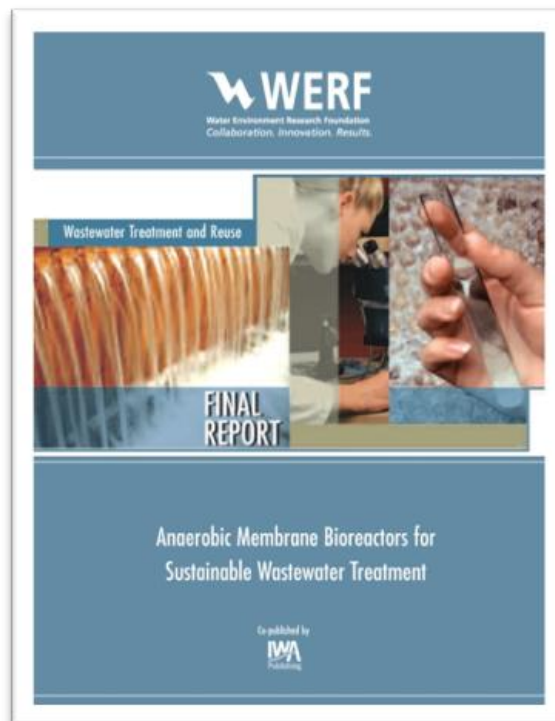
LIFT Is...	LIFT Is Not...
End User Driven	Manufacturer Driven
New Technologies	Established Technologies
Collaborative	Adversarial
National/International	Local/Regional
Shares Cost & Risk Through Partnership	Risk and Cost Born by One Entity
Demonstration / Evaluation	Certification / Validation
Best Available Test / Demo Facilities	One Test / Demo Facility
Subject Matter Experts for Evaluations	Designated Staff for Evaluations
Proprietary and Non-proprietary	Proprietary Only
Project Specific QAPP	One Standard Protocol
Peer Reviewed	Not Peer Reviewed

Example Piloting / Demonstration Projects

Zero Liquid Discharge



Anaerobic Membrane BioReactor



Biosolids to Energy



LIFT Contacts at WEF and WERF

www.werf.org/lift

WERF

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- Technology Evaluation Program (TEP)
- Technology Focus Groups

WEF

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- People and Policy
- Communication and Education