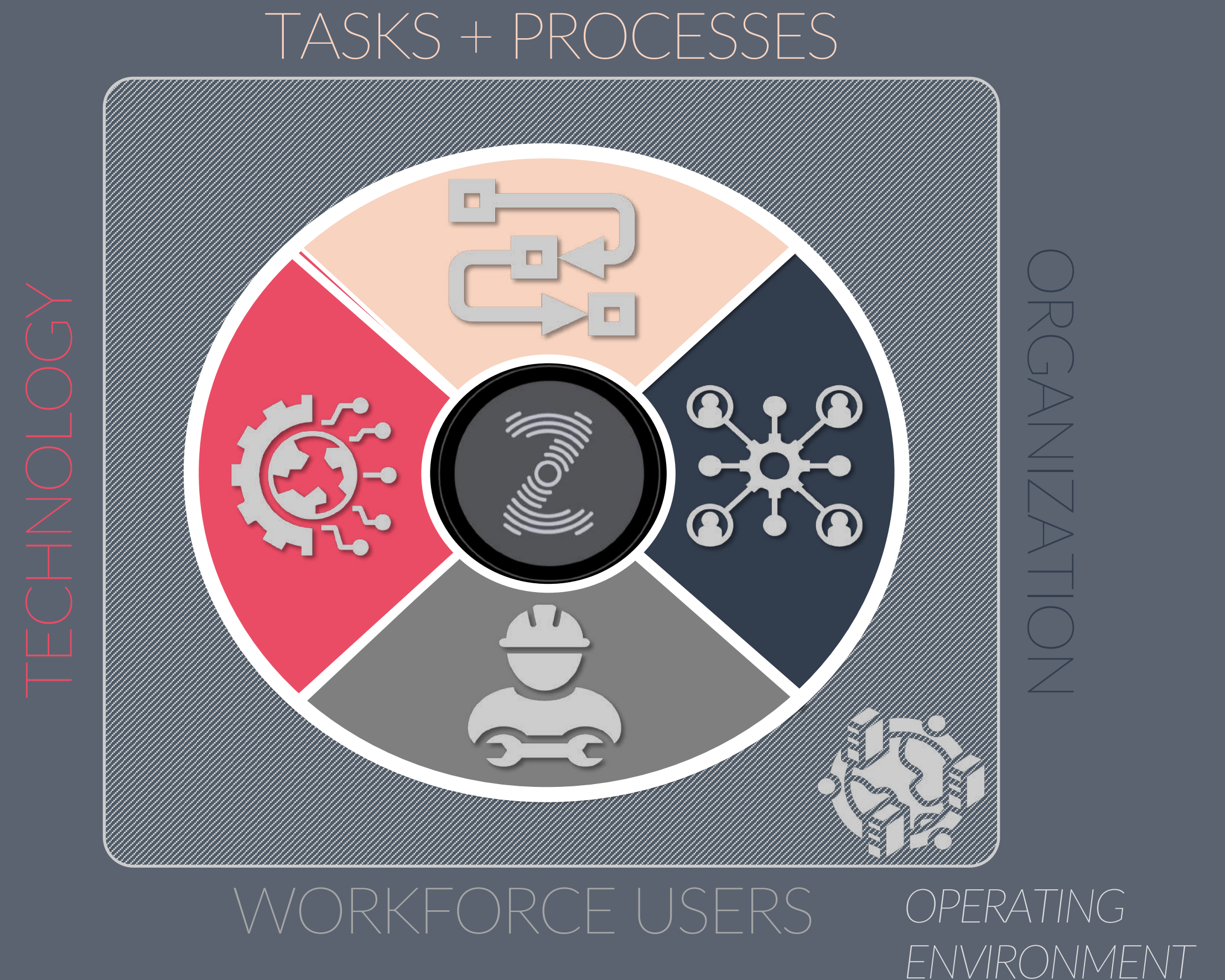


> ZYLTER SOLUTIONS DESIGN LAB

Immersive innovation,
design & strategy for
future of work technology



> Continuing industry & tech innovation is now challenging but essential

The current business environment is requiring *Tech Builders* and *Tech Seekers* to continue innovation and growth amidst traditional challenges and post-COVID constraints.

> Rapidly evolving tech & competitive landscapes

> Industry need to sustain evolution & innovation

> Dispersed & primarily virtual organizations

> Tightening corporate budgets with fewer resources for innovation

Zyler has spent four years building the solution for now...

An efficient approach & all-virtual process for practical innovation, co-creation & tech adoption

> Zylter Solutions Lab: Practical innovation for emerging tech adoption

The Lab unlocks new markets and revenue by enabling teams to discover opportunities, envision futures, develop solutions, deploy capabilities, and support growth while maintaining focus



SOLUTIONS LAB PROCESS & TOUCHPOINTS



STRATEGIC VALUE FOR CLIENTS & PARTNERS



Case Study: Tech-Enabled Neighborhood Design for Wendell Falls

We guided neighborhood strategy and design to leverage emerging technologies for experiences, desirability and land value. The Lab journey included data-driven designs and specific plans to accelerate WF growth and increase its market value.

➤ Visit the online [Project Gallery](#) to explore the project & outcome examples below

NEWLAND TECH-ENABLED NEIGHBORHOOD DESIGN JOURNEY



A data-driven client journey designed to guide development of a tech-enabled neighborhood and hub of opportunity.

Identified tech-enabled outcomes to guide project design

Tech-Enabled Outcome	Description
1. CONNECTED COMMUNITY	Sustainable, robust and evolving physical, virtual and social linkages that support engagement and inclusion of community member individuals, organizations and other community aspects.
2. INTEGRATED TRANSPORT & DELIVERY NETWORK	Multi-modal and regional, local and intra-community transport that enables efficient access to opportunities, resources and events; includes commuter transport and transport of goods to/from the community.
3. ENTREPRENEURIAL ECOSYSTEM	A dynamic and engaged set of commercial, social and functional actors that support opportunity for enterprises of varied scales, industry levels and industries.
4. SUSTAINABLE SOURCING, PRODUCTION & VALUE-ADDING	Thoughtful collection, collection and use of local resources and skills that generate economic and social value over time.
5. SMART RESOURCE MANAGEMENT	Proactive planning, use and monitoring of community and local resources that balance community development and evolution with sound ecological and community practices.
6. AUTHENTIC & COMMUNITY-SPECIFIC EXPERIENCES	Organic and engaging physical, virtual and social experiences that provide unique and iterative opportunities to experience diverse aspects of the local physical, social and cultural geography.
7. EVOLVING POPULATION & WORKFORCE	Resident, worker and visitor access to resources, interactions and environments that promote and enable development of knowledge, skills and abilities for sustained personal and professional development.

7 | AUTONOMOUS GROUND VEHICLES | Ground Package Delivery

TECHNOLOGY	EXAMPLE APPLICATIONS (w/ hyperlinks)
<ul style="list-style-type: none"> Use of unmanned vehicles for package movement and delivery Use of small packages Limited field tech ongoing 	<ul style="list-style-type: none"> Amazon Prime Air Starship Technologies Local Delivery Robot
USER(S)	Individual residents or businesses seeking to have ordered goods delivered quickly and efficiently.
TASK(S) EXECUTED	Delivery of small packages and secured items with accuracy, efficiency and precision tracking.
EMPLOYMENT METHOD	Use of autonomous ground vehicles using existing roads and pre-defined delivery pathways to move packages from pre-defined pick-up location to various destinations.
OPERATING ENVIRONMENT	Primarily use designated (dual-purposes) and/or dedicated lanes, potentially on road and off-road, use of pedestrian walkways (e.g. sidewalks), parking or pick-up areas, road key destinations and handle points.
KEY VALUE / IMPLICATIONS FOR WENDELL FALLS	Improve resident / business quality of life or efficiency through rapid, timely and consistent delivery of commercial items directly to the resident or business.

TECH PRIORITIZATION CHARRETTE

Tech Adoption Roadmap Structure

This Tech Adoption Roadmap provides structured and practical information to guide Newland execution of priority tech applications as part of the Wendell Falls development.

This adoption roadmap addresses these highlighted phases and specific actions (hyperlinked to associated information).

3.1 | Total Cost of Ownership (TCO) considerations

PHASE	REPAIRS	MAINTENANCE
PURCHASE	Addressed by site owner and charging station provider.	Addressed by site owner and charging station provider.
TRAINING	Addressed by site owner and charging station provider.	Addressed by site owner and charging station provider.
SECURITY	Need to have ability to remotely monitor and manage charging station usage.	Need to have ability to remotely monitor and manage charging station usage.
UPGRADES	Addressed by site owner and charging station provider.	Need to have ability to remotely monitor and manage charging station usage.
SERVICE	Addressed by site owner and charging station provider.	Need to have ability to remotely monitor and manage charging station usage.

Potential emerging tech application list (1/4)

Technology	Application	Priority
1. AI	AI-Driven Building Systems	High
2. AR/VR	Virtual Reality Training	Medium
3. AV	Autonomous Aerial Vehicle	Medium
4. AGV	Autonomous Ground Vehicle	High
5. AM	Additive Manufacturing	Medium
6. EV	Electric Vehicle Infrastructure	High
7. IoT	Internet of Things	Medium
8. Cloud	Cloud Computing	High
9. Blockchain	Blockchain	Low
10. Quantum	Quantum Computing	Low
11. Nanotech	Nanotechnology	Low
12. Biotech	Biotechnology	Low
13. Space	Space Exploration	Low
14. Fusion	Fusion Energy	Low

11 | ADDITIVE MANUFACTURING | Local Additive Production Lab

TECHNOLOGY	EXAMPLE APPLICATIONS (w/ hyperlinks)
<ul style="list-style-type: none"> 3D printing Direct metal laser sintering Individual systems available Integrated lab available 	<ul style="list-style-type: none"> Formlabs PreForm Stratim 3D Advanced Manufacturing Center
USER(S)	Individuals or organizations, manufacturing or demand production or repairment parts, products or related items.
TASK(S) EXECUTED	Rapid manufacture of goods with 3D printing and prototyping tools by creating an item or integrated product from electronic design data.
EMPLOYMENT METHOD	Multiple connected and complementary additive manufacturing machines and supporting systems.
OPERATING ENVIRONMENT	Autonomous guided vehicles designed to carry payload average designated objects.
KEY VALUE / IMPLICATIONS FOR WENDELL FALLS	Provides opportunity for local training and commerce from the development, prototyping and production of parts and items to address immediate needs of the local market without the need for massive warehousing, shipping & logistics.

1.1 | Tech Application Concept Illustration

Virtual Reality Neighborhood Tour

Augmented Reality Neighborhood Tour

Key actions to develop AR neighborhood visiting experience:

- 1) Conduct extended reality needs exploration workshops with Durham-based developer, Lucid Dream.
- 2) Develop virtual reality experience based on existing neighborhood CAD data.
- 3) Leverage VR solution to promote WF to external audiences (e.g. businesses).
- 4) Consider development of an AR experience merged with alternative transport to provide an engaging live neighborhood tour.

WENDELL FALLS* TECHNOLOGY ADOPTION ROADMAP

TECH USER GROUPS | Wendell Falls market segments & their evolving needs

Market Segments	CURRENT	NEAR-TERM (2-5 years)	MID-TERM (5-10 years)
Established Business			
Emerging Business			
Emerging Entrepreneur			
Domestic Engineer			
Emerging Youth			
Senior Entrepreneur			
Resident Professional			
VISIONS / PROSPECTIVE RESIDENTS			

Each has distinct sets of priority needs that influence their perceptions of WF attributes and should guide Newland tech adoption strategies

8 | AUTONOMOUS AERIAL VEHICLE | Aerial package delivery

TECHNOLOGY	EXAMPLE APPLICATIONS (w/ hyperlinks)
<ul style="list-style-type: none"> Unmanned aerial systems for autonomous delivery of packages Prototypes, but regulatory risk 	<ul style="list-style-type: none"> Amazon Prime Air Starship Technologies Local Delivery Robot
USER(S)	Parcel or service companies seeking to address customer needs or business needs quickly and efficiently.
TASK(S) EXECUTED	Delivery of small packages and secured items with accuracy, efficiency and precision tracking.
EMPLOYMENT METHOD	Autonomous guided vehicles designed to carry payload average designated objects.
OPERATING ENVIRONMENT	The designated flight path over and around neighborhood (e.g. below 1000' AGL) for delivery from and to established (and proposed) landing pads.
KEY VALUE / IMPLICATIONS FOR WENDELL FALLS	Improve resident and business satisfaction by consistent delivery of packages with increased speed and decreased cost. Demonstrate WF / Newland advanced adoption of emerging tech.

2.1c | Solution Development Options

Followed AR Solution Design

Key Solution Capabilities / Attributes	Contract Needed
<ul style="list-style-type: none"> Pre-Built (no planning) Rapidly becoming a Google Maps standard Rich media twice as likely to generate leads 	<ul style="list-style-type: none"> Custom Architecture, Landscape, & Interiors Development High Tech Enterprise Planning Solutions
Solution Picture or Illustration	<ul style="list-style-type: none"> Lucid Dream
Specific Considerations for Newland Implementation	<ul style="list-style-type: none"> Enables collaborative development Accessible - Lucid Dream Immersive experiences for virtual visits, activities, resident engagement

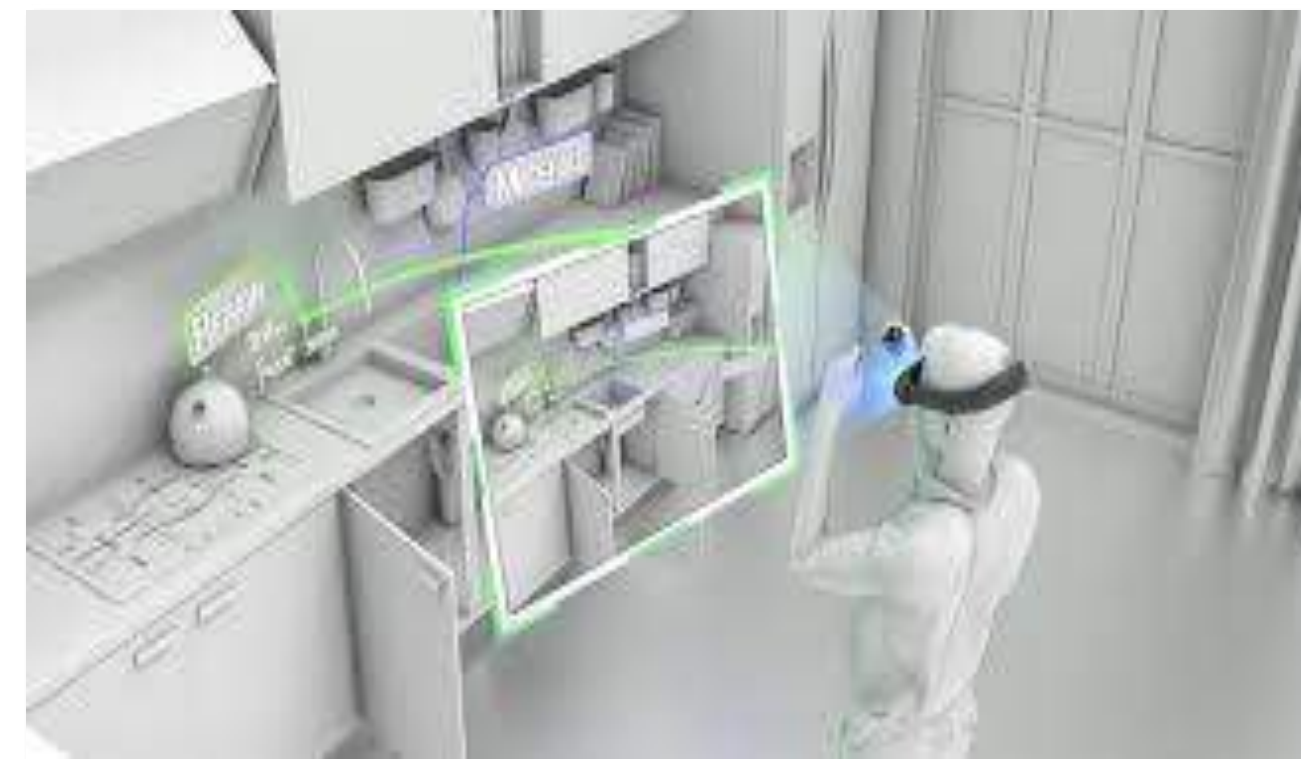
> Testimonial: Talespin Extended Reality for Industry

The voice of our clients says it all. Zylter has guided and enabled the growth Talespin Reality Labs' growth since 2017 from a seed-stage company to a C-Series tech leader. We provide the data-driven XR solution design for industry.



“Zylter's ability to sort through the complexities of today's changing work environments in order to set a strategic path forward is unparalleled. Together we have mapped opportunities and markets that don't exist yet and then step by step have made them a reality.”

--Kyle Jackson, CEO of [Talespin Reality Labs](#)



> OUR ASK OF YOU

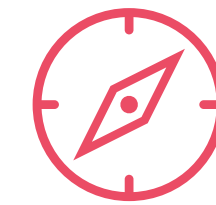
Zylter is dedicated to helping both early-stage *Tech Builders* and enterprise *Tech Seekers* to create, find and adopt emerging technology that addresses the practical needs of industry. The Zylter Solutions Lab is the next step to meet challenges of our time.

We want your help to demonstrate the power of immersive innovation to shape the *Future of Work* and accelerate industry. If you fit into or are engaged with one of our four priority areas, then we want to talk, collaborate and grow together!

Katie D'Andrea
Visual Strategist & Lab Director
Zylter Inc.
E| katie@zylter.com

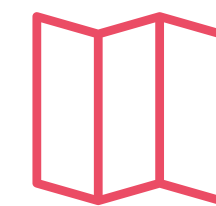
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WHO WE ARE HELPING...



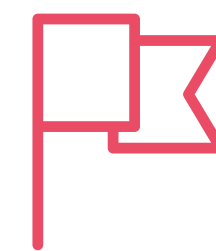
INNOVATIVE *TECH BUILDERS*

Innovative early-stage or growth companies focused on accelerating tech product development, solution design and industrial adoption. Also *Tech Builders* seeking to white-label the Lab to expand offering to their clients.



FUTURE-FOCUSED *TECH SEEKERS*

Industrial and commercial enterprise leaders seeking a lean and collaborative resource to guide practical innovation to address strategic opportunities or challenges.



ECOSYSTEM PARTNERS

Organizations, creators and thought leaders dedicated to defining the Future of Work with emerging technology. We want to understand your capabilities and grow together!



CHALLENGING INDUSTRIAL USE CASES

Industrial needs or opportunities that require solutions based on design or redesign of multiple Sociotechnical System aspects [technology, processes, workforce, etc].
Understanding and addressing tech use cases is our passion!



THE FUTURE OF WORK IS NOW.

ZYLTER SOLUTIONS LAB

[launching early 2021]