

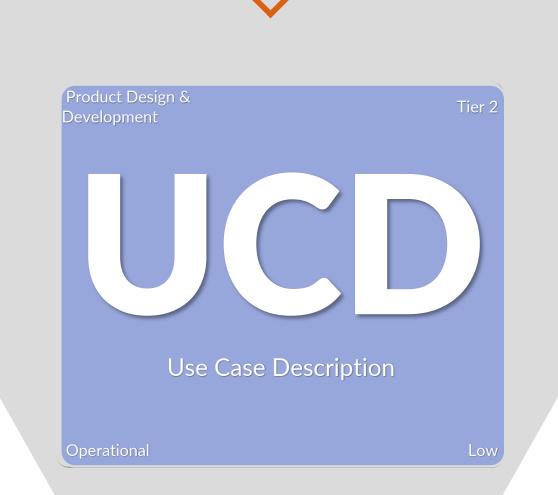
Zylter's Sociotechnical Systems Toolkit

# STS Use Case Description Tech Strategy Framework + Method

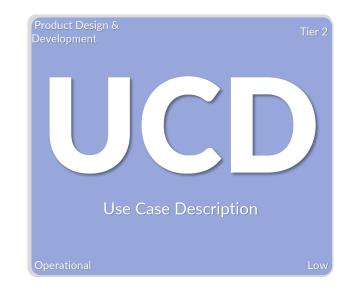


# Use Case Description (UCD)

A framework to describe each Sociotechnical System aspect for a technology-focused use case







# > WHAT IS IT?

This method develops a summary description of each key aspect of a new technology application for a specific use (the use case) with illustrative examples to guide subsequent tech adoption analysis.

## Helpful Hints:



Use this framework when starting to consider potential technologies for adoption.



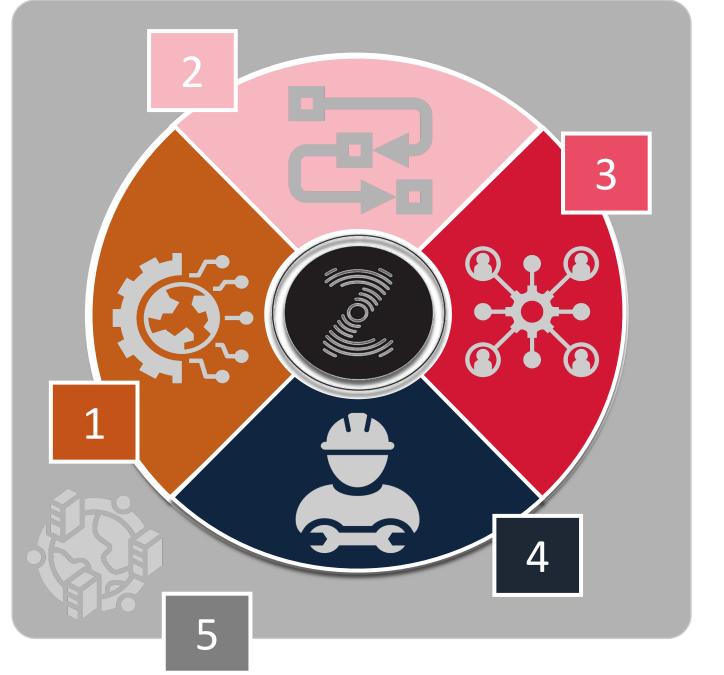
Use this framework to identify more detailed assessments and analysis required to guide tech selection and successful adoption.



Apply QSD- Quantitative Survey Design to conduct in-depth analysis of likely user and workforce perspectives.

Sociotechnical System (STS) aspects addressed by module

- Technology
- Tasks/Processes
- Organizational Structure
- Users/Workforce
- Operating **Environment**





These are key strategic questions that the STS Use Case Description will consider and answer.

What is the maturity or readiness of the new technology (for this application)?

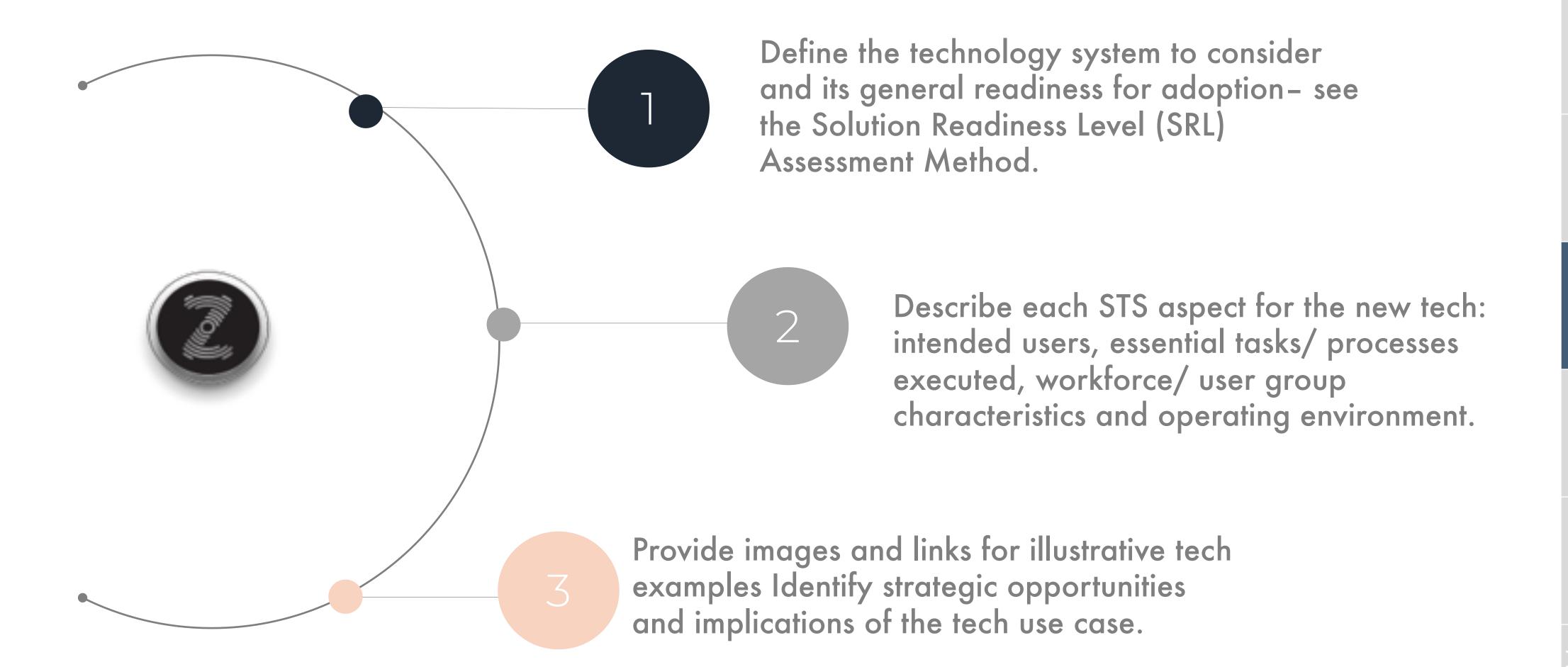
What are the organizational factors that will impact use of the new technology system?

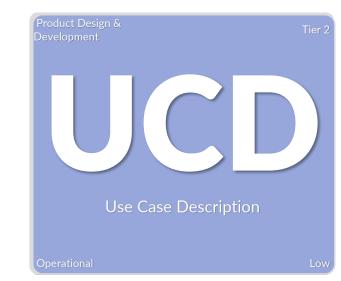
What are the strategic opportunities and implications associated with this new tech application?





# > HOM DO I APPLY ITS





## COMPLETED > ANALYSIS FRAMEWORK

Assessment of technology maturity based on the Technology Readiness Level (TRL)

Summary description of the core technology and its Technology Maturity Level (TRL)

Description of key use case elements that describe how the technology is applied and generates value for the adopting enterprise

Summary of strategic opportunity and implications for the end user

Examples of illustrative solution with links to leading companies and key information sources

## AUTONOMOUS GROUND VEHICLES | Ground Package Delivery

Use of unmanned vehicles **TECHNOLOGY** for pick-up, movement and SRL 8 drop-off of small packages SOLUTION Limited field trials ongoing Individual residents or businesses seeking to have ordered goods USER(S) delivered quickly and efficiently. Delivery of small parcels and assorted TASK(S) items with accuracy, efficiency and **EXECUTED** precision tracking. Fleet of autonomous ground vehicles S using existing roadways or specified **EMPLOYMENT** delivery roadways to move **METHOD** packages from pre-defined pick-up location to various destinations. Primarily use designated bike paths or roadway areas, potentially ad hoc **OPERATING** and unintended use of pedestrian

walkways (e.g. sidewalks); parking or

drop-off areas near key destinations

and transfer points.

**EXAMPLE APPLICATIONS (w/ hyperlink)** 

Nuro Local Delivery



<u>Starship</u> <u>Technologie</u> **Local Delivery** Robot



















**EYLTER** 

**KEY VALUE / IMPLICATIONS FOR** WENDELL FALLS

**ENVIRONMENT** 

Improve resident / business quality of life or efficiency through rapid, timely and consistent delivery of commercial items directly to the resident or business.

# Why We Built It

We are passionate about the art and strategy of emerging tech adoption. Zylter thrives at the intersection of tech analysis, design and strategy.



## Zylter

To learn more about our work with tech innovators and industry leaders at www.zylter.com



#### Questions

For more information or help applying this and other Tool Kit resources, contact us at: STS.solutions@zylter.com



## Explore

To explore the Tech Strategy Tool Kit further or access other methods and resources visit:

www.zylter.com/sts-toolbox



#### Connect

We appreciate any feedback you have to improve these methods and how we support them! Reach out to us on LinkedIn or at www.zylter.com

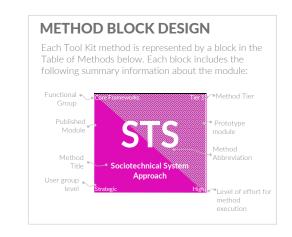
Tech Strategy Tool Kit

Periodic Table

of Methods

This periodic table lists and categorizes each of the methods included in the current *Tech Strategy Tool Kit*. The methods are organized by Functional Group based on the functional area addressed and by Tier based on the level of effort and expertise required for execution.

Each module applies methods that are based on industry best practices and that have been applied, refined, and validated through client-focused Zylter projects and analyses.



CORE FRAMEWORKS	STRATEGIC PLANNING			SOLUTION DESIGN + DEVELOPMENT			SOLUTION ADOPTION + LIFECYCLE PLANNING			MARKET ANALYSIS + DEVELOPMENT			USER + WORKFORCE ANALYSIS			PROCESS DESIGN + IMPROVEMENT		
TIER 1  Summary  Approaches*  Sociotechnical System Approach  Strategic  Strategic  Tier 1 Core Frameworks  Tier 1 Core Frameworks  Tier 1 Core Frameworks  Tier 1 Core Frameworks  Ter 2 Core Frameworks  Ter 3 Core Frameworks  Ter 4 Core Frameworks  Ter 4 Core Frameworks  Ter 4 Core Frameworks  Ter 5 Core Frameworks  Ter 5 Core Frameworks  Ter 6 Core Frameworks  Ter 7 Core Frameworks  Ter	Strategic Planning Tie	n		Solution Design + Development  TRL  Technology Readiness Level Assessment	Solution Readiness Level Assessment  Moder  SRL  Moder  Moder  Moder  Moder	ar 1												
General Assessment  Methods and resources that can be executed with mostly descriptive information and quickly applied to inform key decisions. These methods are general supported by or expanded on by detailed methods and technical analyses.	Strategic Planning Ties  SEM  Strategic Engagement Mappin	OKR Objectives and Key Results Review Design	SR Strat Recommendation Development	Solution Design + Development Tier 2	System Component Sketch	SCUU System Capability to Use Requirement Crosswalk	Sclution Adoption + Life Cycle Planning  ASA Assessment of Solution Alternatives	2 Solution Adoption + Life Cycle Planning  PPP Pilot Project Plan	2 Solution Adoption + Life  Cycle Planning  DEP  Drone Employment Profile	Market Analysis + Developm Tier 2  MEC  Media Engagement Concept	Market Analysis + Developm Tier 2  VPF  Value Proposition Framework		User Research Tier 2 UPD User Persona Development	User Research Tie  USA  User Segmentation Analysis	Tie 2 The Research Tie 2 The 2 Task Function Hierarchy Description	Process Design + Inprovement TSD  Team Structure Design		Process Design + Improvement  OPD  Operational Process Description
	Strategic Modern Strategic Plancing Tie  SFD  Strategic Forecast Development	ROI Strategic Return on Investment Assessment	KPI  KKPI  K	Development Ter 2  TUI  Technology Use Case Identification	olegic Modern Inton Design + The  OEA  Operating Environment Assessment	ate Statege Moderate  Solution Design + Tier 2  PRD  Product Requirements Document Design	Operational Moderal Solution Adaption + Ule Tier Cycle Planning COA Concept of Operations Assessment	e Operational Moders. Schulion Adeption + Life Tie SES  System Employment Sketch	te Operational Moderate	Strategic Low	Strategic Low		Operational Low User Research Text  SDD  Service Delivery Design	Strategic L	on Operational Assert	Operational Lov Process Design + Tier Improvement  ACLIVITY Identification Assessment	y Operational Moderate 2	Operational M
	PEM Product Ecosystem Maturity Assessment	SPI  Strategic Planting The SPI  Strategic Priority Identification	atal Strategic Micherote  Michero	Strategic Moderate Schultun Design + Development  USD  User Story Development	Operational Solution Design + Development  DPR  Design/Prototype Review Session	ate Operational  2 Solution Design + Development  UEM  User Experience Mapping	Operational Moderal	e Operational Modera	io.				Operational tox			Operational Moderat		
TIER 3 Detailed Assessment  Methods and resources that compile extensive numeric and/or descriptive information to provide a more detailed examination and assessment.	Strategic Planning Tie	3 Strategic Planning Tie	r 3 Strategic Planning Tier 3  IRD  Implementation Roadmap Dev	Solution Design + Tier 3  Solution Design + Tier 3  Solution Journey Mapping  Operational Moderate	SCM System Capability Map  Operational Moderate	STM System Technology Map	Solution Adoption + Life Cycle Planning  TCO Total Cost of Ownership Assessment Operational  Moderal	Solution Adoption + Life Cycle Planning  CDR Capability Development Roadmap  e Strategic  Modera	SDC  Solution Deployment Concept  te Operational Moderate	TAM  Total Addressable Market  Analysis  Operational  Moderate	PLD Program-Level Development Approach Stategic Moderate	Strategic Planning Tier 3  CLA  Competitor Landscape Analysis  Strategic Moderate	User Research Tier S  QUP  Quantiative Usage Profile Creation  Operational Moderate	User Research Tie  QSD  Qualitative Survey Design Operational Moder	FITA Functional Task Analysis	Process Design + Inprovement  PRL  Production Readiness Level  Operational Hig	ACTIVITY Based Management Design  Operational  High	Process Design + Improvement  OPM Operation Process Mapp
	Strategic Planning Tie	3 Strategic Planning Tie	SFA Strategic Powering  SFA Strategic Foresight Analysis	PCD Product Catalog Design	SRI Solution Requirments Identification	SSS System Sub-Component Summary	Schitch Adaption + Life Cacle Planning  KTD  Knowledge Transfer Design Approach	MRA  Manufacturing Readiness  Assessment	Solidate Dauge Service  SOP  System Operating Profile Development				Functional Task Analysis	SFG Structured Focus Group	Tech Adportion Indicates Assessment	Proceed Design (Interception)  AKD  Activity KPI Definition	Process Design + Track TSD Team Structure Design	PRE PRODUCTION OF THE PRODUCTION OF THE PRODUCTION READINGS LE ASSESSMENT
	Strategic Hi	gh Strategic Hi		Openitional 140 control Darger Tree controlled Control  UCP Use Case Prioritization				S (Occusion) 8						and and an	in in inininina and and and and an inininininininininininininininininin	Occusions	Notes de la constante de la co	Sentimal M
TIER 4 Methods and frameworks that apply Technical extensive data that is usually numeric and generally requires specialized software and expertise to execute.	Strategic Planning Tier  OBA  Organizational Benchmarking Analysis	4 Strategic Planning Tie	SOM	Solution Design + Tier S  SCM  System Capability Map	Solution Design + Tie  PR  Product Roadmap  Development	COA  Concept of Operations Assessment	TCM  Total Cost of Ownership  Modeling	FLD Facility Layout Design	COA  Concept of Operations Assessment	Market Analysis + Developm Tier 4  TCB  Technical Content Database	PPD Pricing Proforms Development	CRM Cost/Revenue Modeling	CONTRACTOR OF THE PROPERTY OF	User Medicare Analosis T	The Control of the Co	Process Design + Improveme Tier  PMS  Process Modeling + Simulation	ABC	PDR Process Design & Redes
	Operational H	e State Color Colo		TPD  Technical Proposal Design	SDM Simulation Description Matri	UPP Use Case Prioritization Proforms			3. (24:4444)	SNA Social Network Analysis	QDD  Qualificative Design	TPM  Training Cost Modeling	LID  Lean Instructional Design	Specification (Specification Conference Conf	els Circumstonia Missessus g	Operational Hig	Cheravara)	
	Comments	si strotee		Operation to the state of the s	XAP  XR Application Mapping	Product Catalog Prioritzation				Chentens Hud	Сормания 2948.	Menten Matheway	Ceremonal State	States States				
IER 1: SUMMARY APPROACHES: High-level approaches and resources t requires execution of multiple higher-tier methods to successfully applete. These are the core execution roadmaps for Tech Builder growth		STRATEGIC PLANNING		GROUP 2  SOLUTION DESIGN + DEVELOPMENT			SOLUTION ADOPTION + LIFECYCLE PLANNING			MARKET ANALYSIS + DEVELOPMENT			USER + WORKFORCE ANALYSIS			PROCESS DESIGN + IMPROVEMENT		

complete. These are the core execution roadmaps for Tech Builder growth
milestones, Tech Seeker solution adoption stages and the SocioTechnical
System Model that guides Zylter design of specific methods.

Product Design & Development

Tier 2



Use Case Description

Operational

Low