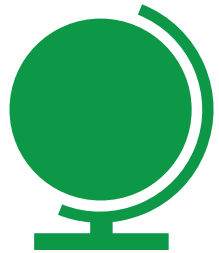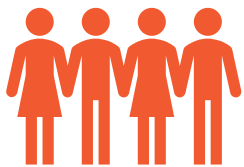# Future-State Research & Analysis

Contents

Country Segmentation

Customer Segmentation

Country Segmentation

Assumptions for Model Prioritization

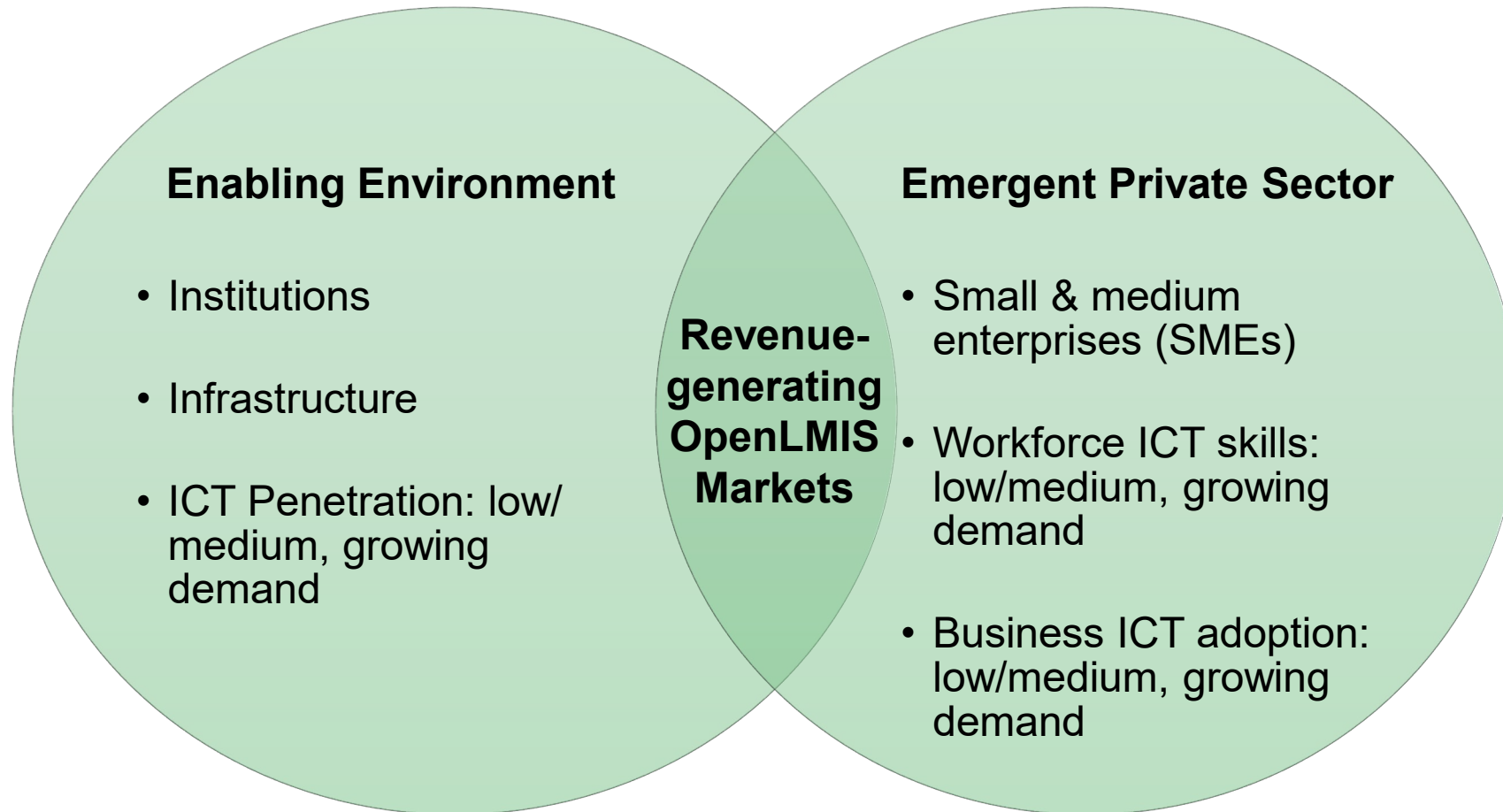**1. OpenLMIS landscape can shift to achieve sustainability.**

- Potential markets:
  - Multiple regions
  - Multiple market types

- Potential paying customers:
  - Private and public sector
  - Customer needs match OpenLMIS product(s) – current or future

2. OpenLMIS product(s) can shift to achieve sustainability.

- Products/features:
  - Fit customer needs or can be adapted, possibly for adjacent markets
  - Can be continuously maintained/developed through a sustainable business model

3. These shifts may come in multiple stages.

OpenLMIS Target Markets

Enabling Environment

- Institutions

- Infrastructure

- ICT Penetration: low/ medium, growing demand

Revenue- generating OpenLMIS Markets

Emergent Private Sector

- Small & medium enterprises (SMEs)

- Workforce ICT skills: low/medium, growing demand

- Business ICT adoption: low/medium, growing demand
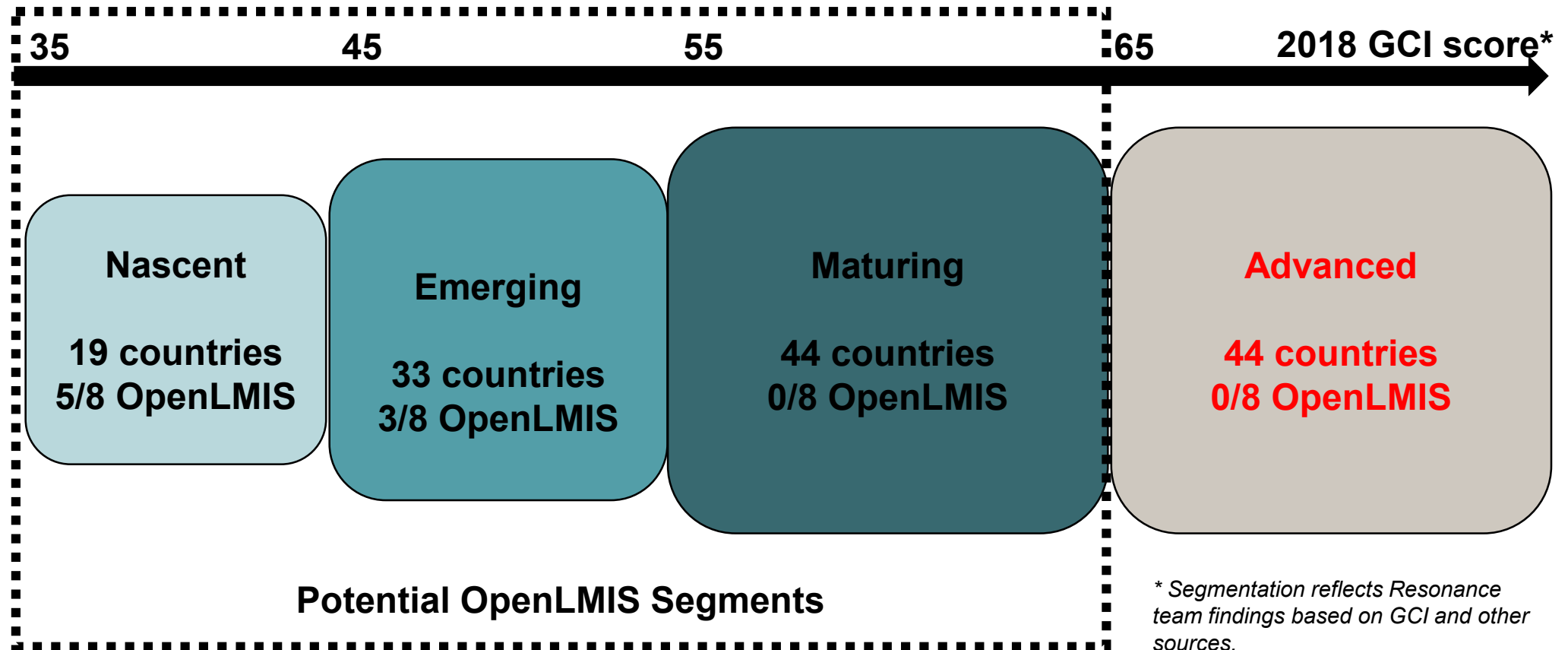
Research Approach

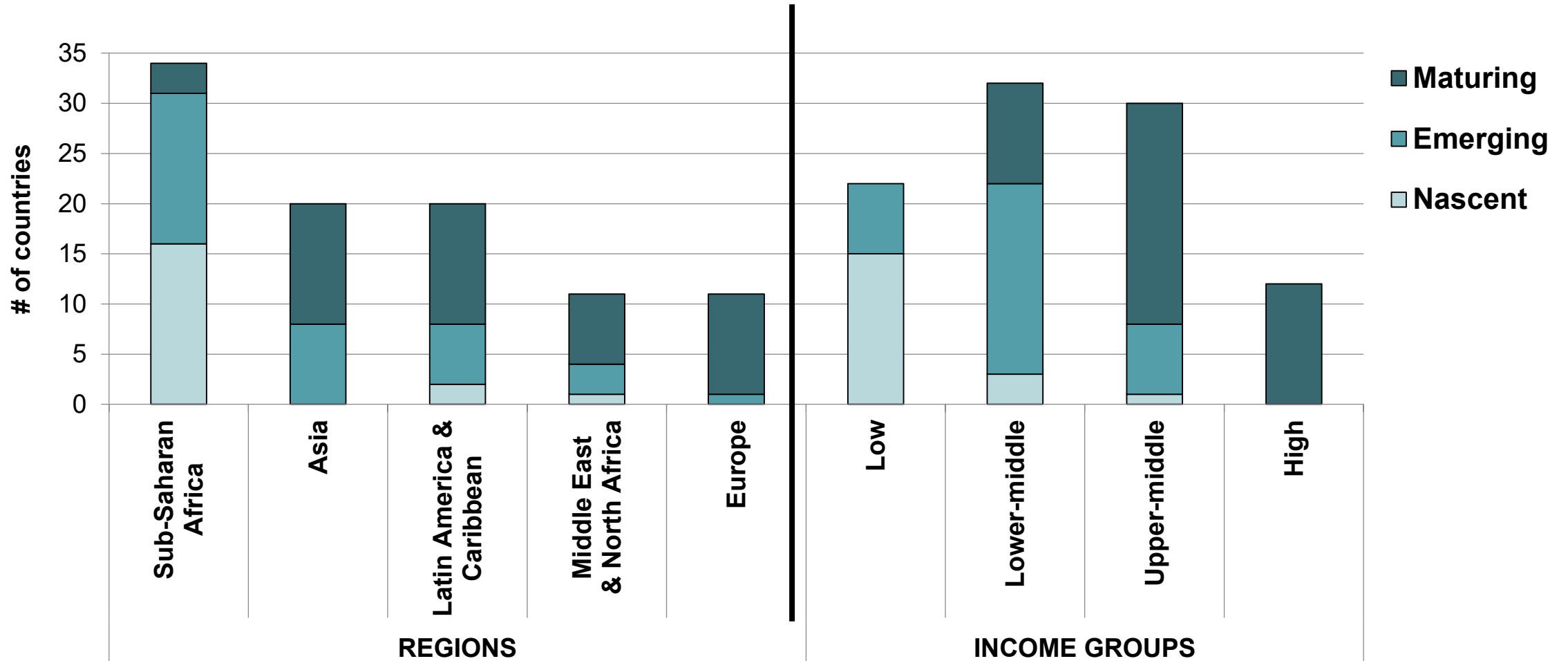**Focus:** Developing countries where OpenLMIS can capture market share.

Sources

- World Economic Forum Global Competitiveness Index (GCI) 2018

- World Economic Forum Networked Readiness Index 2016 – Business ICT Use

- Additional country-level economic and demographic data

2018 GCI Pillars	
1	Institutions
2	Infrastructure
3	ICT Adoption
4	Macroeconomic Stability
5	Health
6	Skills
7	Product Market
8	Labor Market
9	Financial System
10	Market Size
11	Business Dynamism
12	Innovation Capability

Country Segmentation

Country Segmentation

35   45   55   65   **2018 GCI score***

Nascent

19 countries
5/8 OpenLMIS

Emerging

33 countries
3/8 OpenLMIS

Maturing

44 countries
0/8 OpenLMIS

Advanced

**44 countries
0/8 OpenLMIS**

Potential OpenLMIS Segments

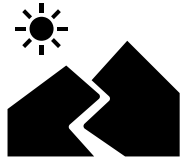** Segmentation reflects Resonance team findings based on GCI and other sources.*

Country Segment Characteristics

Key Takeaways

	Institutions	Infrastructure	Private Sector	Business ICT	OpenLMIS Implications
Maturing	Functional	Mostly complete, reliable	Established, competitive	Medium	+ Higher revenue potential
Emerging	Functional	Somewhat complete, reliable	Burgeoning	Low to medium	- Lesser known markets - Advanced customers - Tough competition
Nascent	Limited	Incomplete, unreliable	Limited	Low	+ Known markets - Limited revenue potential

Recommendations:
➢ **Short-term: Focus on Nascent and Emerging countries with growing private sectors**
➢ **Long-term: Explore expanding OpenLMIS to customers in all country segments**

Customer Segmentation

Approach

Focus: Potential revenue-generating customers across all country segments in multiple markets:

- Health
- Agriculture
- Education
- Logistics
- Humanitarian/ Disaster Relief

Sources

- Regional **/** country-level data, market analysis and case studies
- Market Sounding visits
- Firm websites

Key Considerations

- Current OpenLMIS customers
- Customer affiliations, target customers, quality controls

Customer Segments

	Customer Segment	LMIS Need*		
		Nascent	Emerging	Maturing
Health	Hospital Network	✓	✓	✓
	Clinics Network	✓	✓	✓
	Pharma Manufacturer	✓	✓	✓
	Pharma Supplier/ Retailer network	✓	✓	✓
	Diagnostics Lab	✓	✓	✓
	Medical Device/ Tech Supplier	✓	✓	✓
Education	K-12 Schools		✓	✓
	University/ Technical & Vocational Education & Training (TVET) Institutions	✓	✓	✓
	EdTech			
Logistics	3PL	✓	✓	✓
	4PL			
Agriculture	Input Supplier	✓	✓	✓
	Co-op	✓	✓	✓
Humanitarian/ Disaster Relief	NGO, UN Organizations	✓	✓	✓

Legend: Maturing / Emerging / Nascent

*Segments that need a logistics management information system. Other factors will determine whether OpenLMIS is the right fit.

Customer Segment Scorecard

Score	Description	Indicators (Estimated)	Low	Medium	High
Market size	# of potential customers	• # of facilities per country	0-150	150-500	500+
Revenue	% of potential customers in the private sector	• % for-profit private facilities • % nonprofit private facilities (weighed at 50%)	0%-25%	25%-50%	50%-100%
Cost	Additional investment required vs. baseline implementation costs	• Customer research & analysis • Product development & adjustment • Marketing	0-1 true	2 true	All 3 true
Risk	# of potential competitors	• Weak/ absent OpenLMIS competitive advantage • Donors offering similar product at similar cost • Commercial enterprises offering similar product at similar cost	0-1 true	2 true	All 3 true
Impact	% of customers contributing to one or more OpenLMIS core attributes	• % customers improving delivery of key commodities, offering solutions for low- and middle-income countries, and/ or strengthening capacity of local and regional partners	0%-30%	30%-70%	70%-100%

Customer Segments in Health

Segment Attribute	Pros & Cons	
Market size	+	Known and growing customer base
	+/-	Market fragmentation
Revenues	+	Growing private sector
	+	Existing buy-in for product
	-	Possible perception/ reputation of OpenLMIS / other open-source products as "free"
Costs	+	Limited investment in product development required compared to adjacent markets
	-	Some investment in understanding diverse customers required
	-	Some investment in entering/ navigating new markets required
Risks	+	OpenLMIS competitive advantage and partner network
	-	Donors offering similar products at similar cost
	-	Commercial enterprises offering similar products at similar cost
	+/-	Market fragmentation
Impact	+	Significant contribution to OpenLMIS mission and core attributes

Health Customers- **Nascent Countries**

Customer Segment	Market Score	Revenue score	Cost Score	Risk Score	Impact Score
Hospitals Network	🟡	🟡	🟢	🟢	🟢
Clinics Network	🟢	🟡	🟢	🟢	🟢
Pharma Manufacturer	🔴	🟡	🟡	🟡	🟢
Pharma Supplier/ Retailer	🟡	🟡	🔴	🟡	🟢
Diagnostics Lab	🔴	🟡	🔴	🟡	🟢
Medical Device/ Tech Supplier	🔴	🟡	🟡	🟡	🟢

Recommendation
- Hospital Networks
- Clinic Networks

- Other Health Customers

GO

WAIT

Advantages
- OpenLMIS competitive advantage

Barriers
- Smaller markets with lower revenue potential
- Cost to analyze and adjust customer needs
- Competition from donors

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Health Customers- **Emerging Countries**

Customer Segment	Market Score	Revenue score	Cost Score	Risk Score	Impact Score
Hospitals Network	🟢	🟡	🟢	🟡	🟢
Clinics Network	🟢	🟡	🟢	🟡	🟢
Pharma Manufacturer	🟡	🟡	🔴	🟡	🟢
Pharma Supplier/ Retailer	🟡	🟡	🔴	🟡	🟢
Diagnostics Lab	🟡	🟡	🔴	🟡	🟢
Medical Device/ Tech Supplier	🟡	🟡	🔴	🟡	🟢

Recommendation
- Hospital Networks
- Clinic Networks

- Other Health Customers

GO

WAIT

Advantages
- Larger markets with revenue potential
- OpenLMIS competitive advantage

Barriers
- Substantial cost to analyze and adjust to diverse customer needs
- Competition from donors and commercial software enterprises

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Health Customers- **Maturing Countries**

Customer Segment	Market Score	Revenue Score	Cost Score	Risk Score	Impact Score
Hospitals Network	🟢	🟡	🔴	🟡	🟢
Clinics Network	🟢	🟢	🔴	🟡	🟢
Pharma Manufacturer	🟡	🟡	🔴	🔴	🟢
Pharma Supplier/ Retailer	🟢	🟡	🔴	🟡	🟢
Diagnostics Lab	🟡	🟡	🔴	🔴	🟢
Medical Device/ Tech Supplier	🟡	🟡	🔴	🟡	🟢

Overall Recommendation

WAIT

Advantages
- Larger markets with good revenue potential

Barriers
- High cost to analyze and adjust to needs of advanced/ diverse customers
- Competition from commercial software enterprises
- Weaker OpenLMIS competitive advantage

Customer Segments in Adjacent Markets

Segment Attribute	Pros & Cons	
Market size	+	Potential customer base
	+/-	Market fragmentation
Revenues	+	Growing private sector
	-	No existing buy-in for product
	-	Possible perception/ reputation of OpenLMIS / other open-source products as "free"
Costs	-	Substantial investment in product development required compared to health customers
	-	Substantial investment in understanding diverse customers required
	-	Substantial investment in entering/ navigating new markets required
Risks	-	No OpenLMIS competitive advantage or existing partner network
	-	Donors offering similar products at similar cost
	-	Commercial enterprises offering similar products at similar cost
	+/-	Market fragmentation
Impact	+	Significant contribution to OpenLMIS core attributes

Adjacent Markets Customers

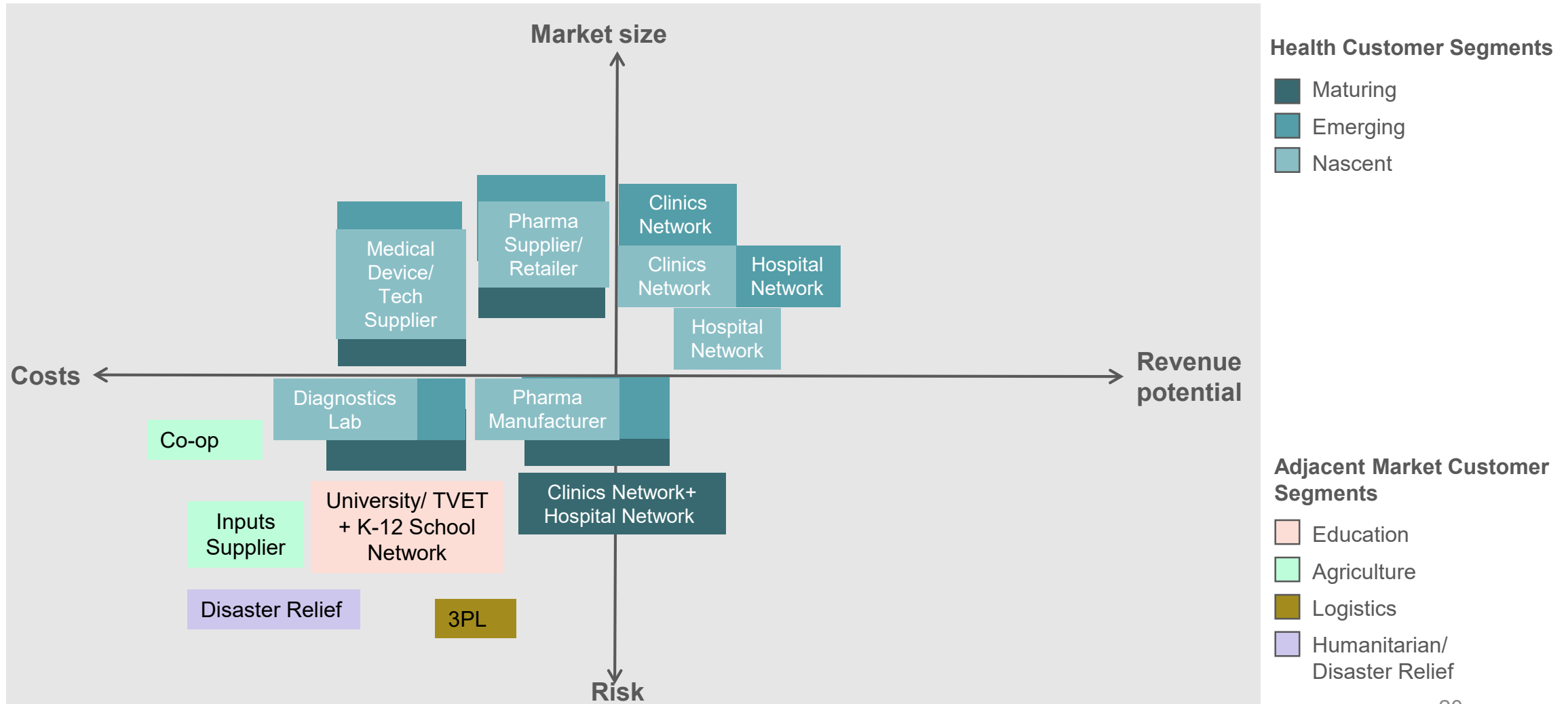| Adjacent Market	Customer Segment	Market Score	Revenue score	Cost Score	Risk Score	Impact Score
Education	K12 School Network	🟡	🟡	🔴	🟡	🟢
	University/ TVET	🟡	🟡	🔴	🟡	🟢
Logistics	3 PL	🟡	🟢	🔴	🔴	🟡 (pale)
Agriculture	Inputs Supplier	🟡	🟡	🔴	🟡	🟢
	Co-op	🟡	🔴	🔴	🟡	🟢
Humanitarian/ Disaster Relief	NGO/ UN Org.	🟡	🔴	🔴	🟡	🟢

Overall Recommendation

WAIT

Barriers
- High cost to analyze and adjust to needs of advanced/ diverse customers
- Competition from donors and commercial software enterprises
- No OpenLMIS competitive advantage

Customer Segment Assessment*

Health Customer Segments
- Maturing
- Emerging
- Nascent

Adjacent Market Customer Segments
- Education
- Agriculture
- Logistics
- Humanitarian/ Disaster Relief

Meant to be illustrative and as a guide for discussion, placement is not exact.