

Final presentation

**Company B EMS Electronic
System Project**

Customer segments expansion solution



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Project introduction

Company Overview		Company B is the global leader in medical technology. Company B markets an EMS electronic patient care reporting systems(ePCR).
Situation		With the advent of the pandemic, Company B believes it should more aggressively target additional segments of EMS agencies
Potential Segments		The ideal segment Company B currently sells to is a select segment of the pre-hospital EMS environment in the U.S. This group can be segmented into larger systems (greater than 15 ambulances) with a dedicated and professional IT and project management support environment.
Main issue		Company B needs market data as on what the market segmentation should be for the ePCR system and which segment or segments should they pursue.

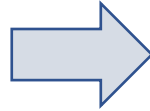


Executive Summary

Company B is recommend to target the urban agencies agencies who have 1-2 ambulances to gain maximum revenue

The urban customer segments

- Geographic type.
- Number of vehicles in the agencies.
- Each segments' revenue
- Professional IT supports and mature management teams.



- The urban area has the larger number of agencies.
- There are large number of agencies who have 1-2 ambulances in urban area.
- The agencies in urban area tend to have professional IT supports and mature project management teams.

With the growth of ambulance services, company B has a large potential market size to sell the ePCR product.

Ambulance Services industry has exhibited growth in the last 5 years and will continue grow in the future.

1. The total revenue of ambulance services in 2019 is \$17.5bn. The profit is \$1.8bn. The anticipate annual growth from 2019 to 2024 is 2.2%.

Ambulance Services industry has benefited from strong demand for emergency and nonemergency ambulance services.

1. the number of people aged 65 and older expands => require ambulance services.
2. As a result of healthcare reform, more individuals purchase private insurance => demand for ambulance services increase.

Large Market Share

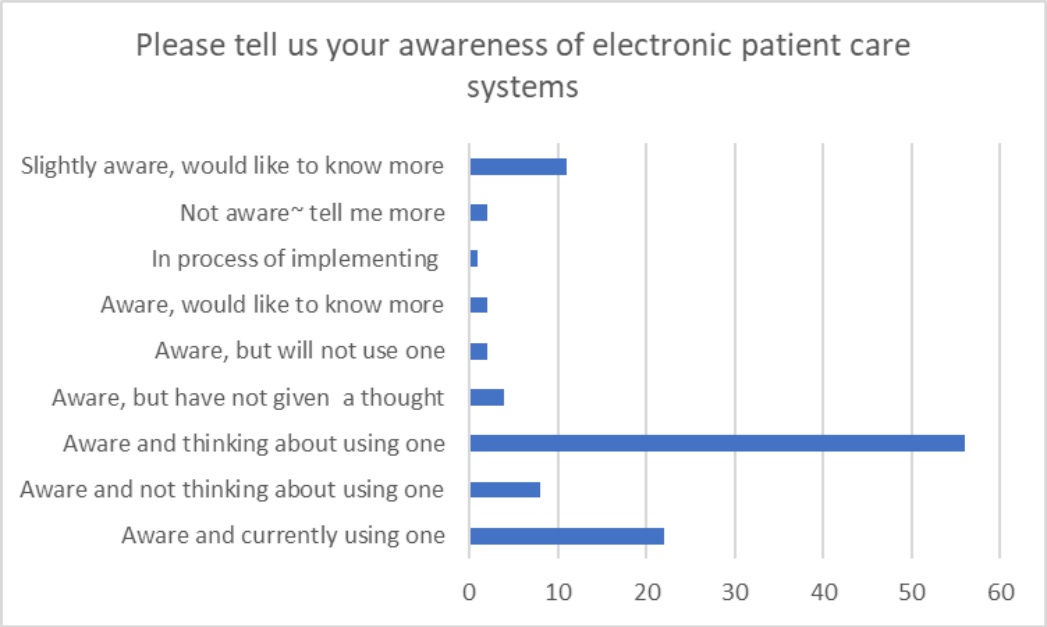
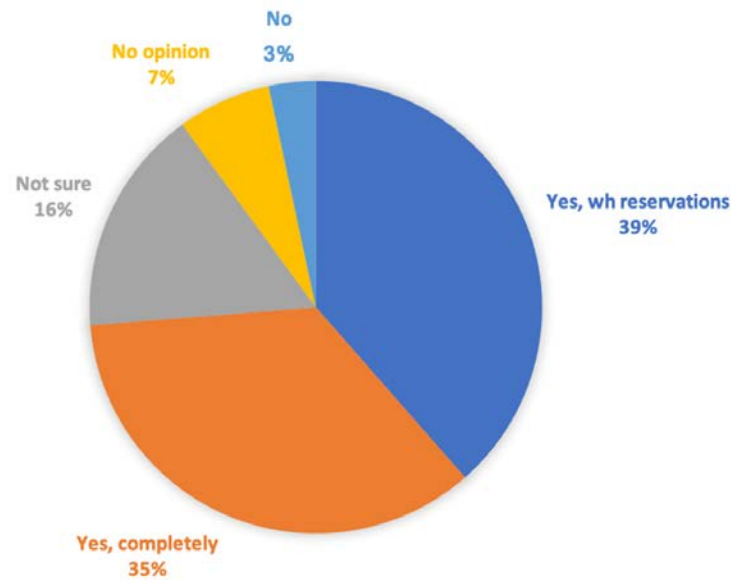
1. There are no major players in this industry

Major industry operators have enabling ambulance providers to growing number of private equity firms.

1. over the five years to 2024, the number of industry enterprises is expected to increase at an annualized rate of 1.8% to 29,520 companies.

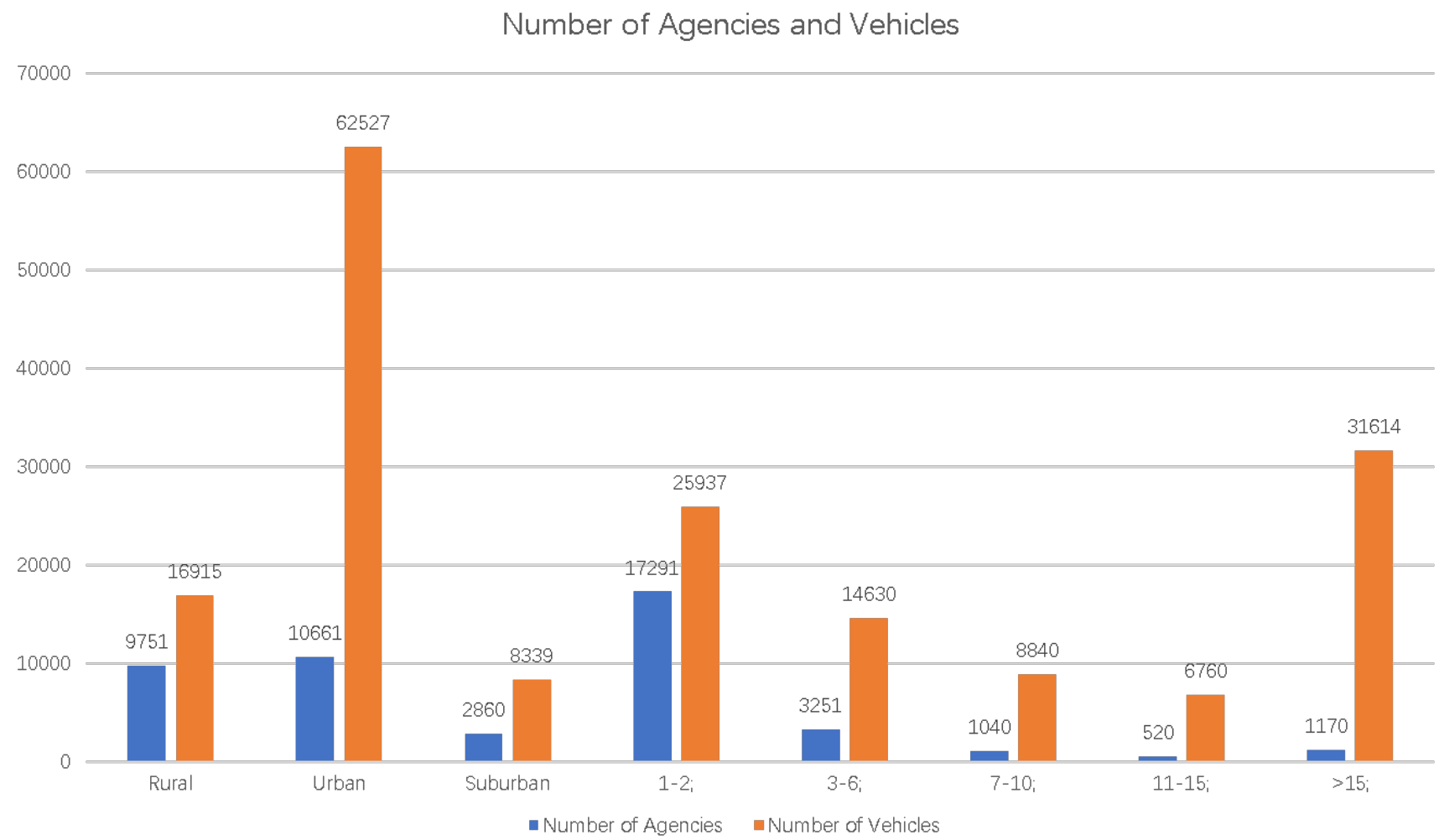
The electronic patient care system is recognized and trusted by general customers, which indicate that ePCR has huge market potential.

TRUST OF ELECTRONIC DATA MANAGEMENT



- Key take-away:
- 1.The majority of customers show they trust the electronic data management system completely and will reserve the system.
 - 2.Most of the customers aware the electronic patient care system and willing to know more.

There are 8 types of segments that could be considered.



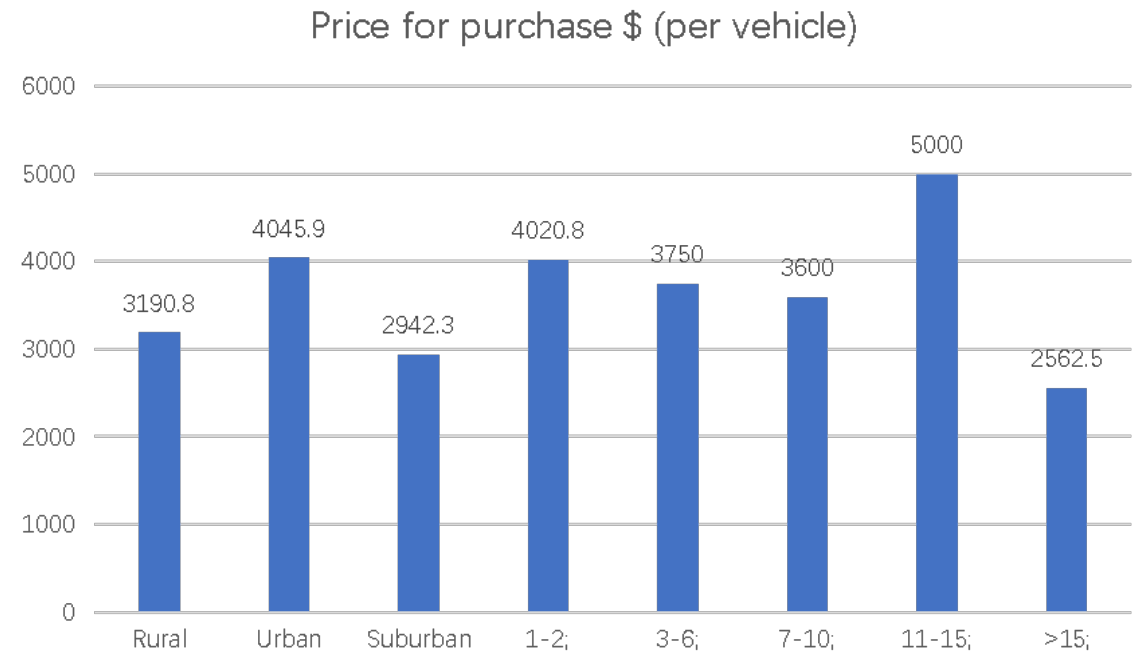
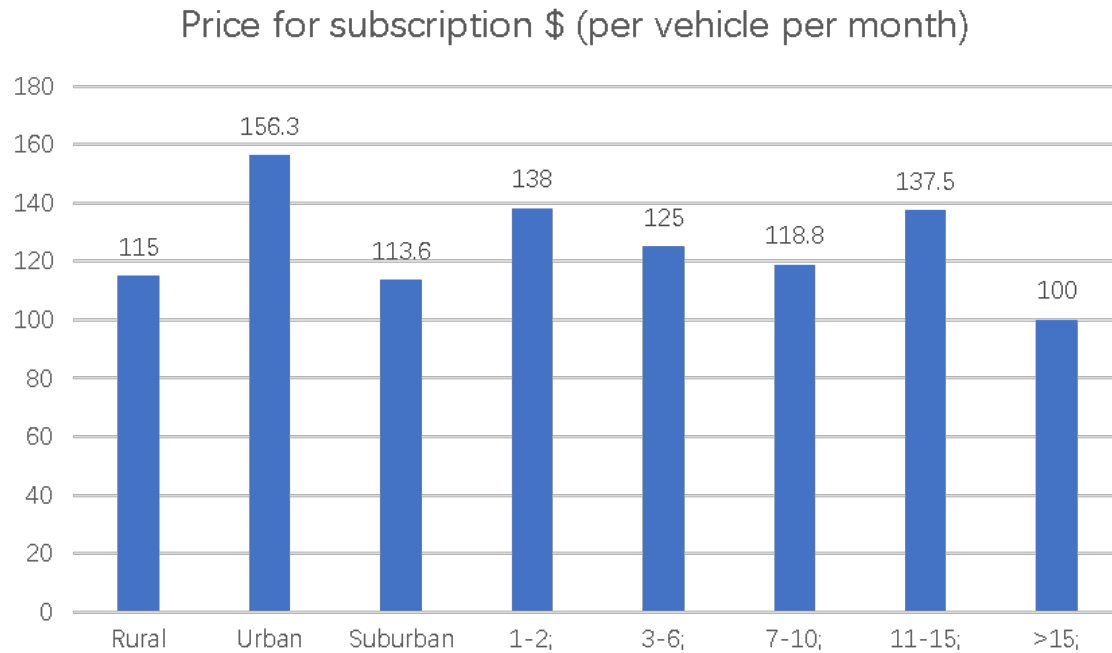
For geographic type, there are rural, urban, and suburban segment.

For the size based on number of vehicles per Agency, there are size1-2, 3-6,7-10,11-15 and larger than15

Urban segment has the most vehicles and the number of agencies in urban segment and with 1-2 vehicles are both more than 10,000.



The urban segment is more suitable segment that Company B could enter



Key take-away:

1. People in the urban area accept the highest subscription price (\$156.3 per vehicle per month)
2. People in size 11-15 segment accept the highest purchase price (\$5,000 per vehicle) while people in the urban area accept the second highest purchase price (\$4,045.9)

Executive Summary

High Level Analysis

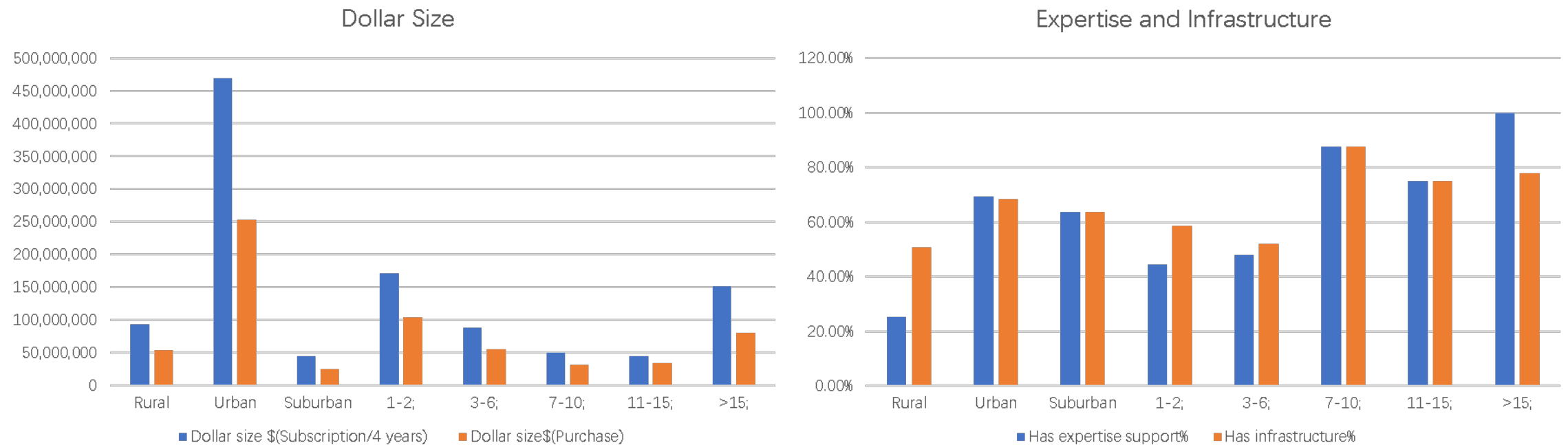
Sector Selection

Recommendations

Risks & Mitigation

Next Steps

The urban segment is more suitable segment that Company B could enter



Key take-away:

- 1.The urban segment has the largest dollar size of market.(\$469 million for 4-year subscription and \$253 million for purchase)
- 2.Almost 70% agencies in urban area have expertise support and corresponding infrastructure.
- 3.Due to the large high income customer group in urban area, the cost of marketing and employment tend to have high profit.

Executive Summary

High Level Analysis

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Risks & Mitigation

Next Steps

Company B needs to focus on 3 key features to enter the market and gain reliability and trust for new system





Central Server	Authorization	Accuracy
Having data on a central server makes receiving data wirelessly upon 911 dispatch very quick with advanced data mining system	Bio-surveillance monitoring ensures the safety of the patient record, tracking who and where it is being wirelessly sent to, and who has access to this information	Quick and accurate ePCR ensures faster response time for patients in need, also accurate records allow for EMS to react appropriately



Complete workflow to provide real-time telemedicine making ePCR systems reliable for EMS.

- Reliable IT people to ensure system is up to industry and technological standards
- Reliable bio-surveillance monitoring staff for system transactions
- Reliable EMS staff
- The reliability and credibility of our system and staff allow our marketing strategists to sell our products

Industry rivalry, policies, data collection, and technology are risks that need to be mitigated using Company B's resources.

Risks	Level	Mitigation
Regulation Change: With advent of the pandemic, having ePCR access across states may become mandatory as people may need to stay quarantined in different places.		Regulations needs to monitored to properly so Company B can update ePCR system accordingly and accommodate change.
Data Competition: Another company proposes a national database not relying on transmission of patient records threatening Company B's position as global leader in medical technology.		Company B should consider making their database a national database accessible anywhere regardless of the segment they choose to sell to but also consent from patients to have their data accessible to EMS nationwide.
Data Collection: Another company may be in touch with all EMS affiliates staying up to date on patient records however some people may not have records.		Company B needs to constantly update and add patient records to the system but also be inclusive of those that do not have a record to have a more accurate record of people.
Connection Competition: Other competitors may find ways to gain entry into market as it is a web-based system which can be developed to be a more quick and accessible technology to compete with Company B.		With web-based electronic system, Company B needs to develop a unique, effective, and secure system protocols protecting the patients records with continuous, flawless wireless connection.



Low Risk

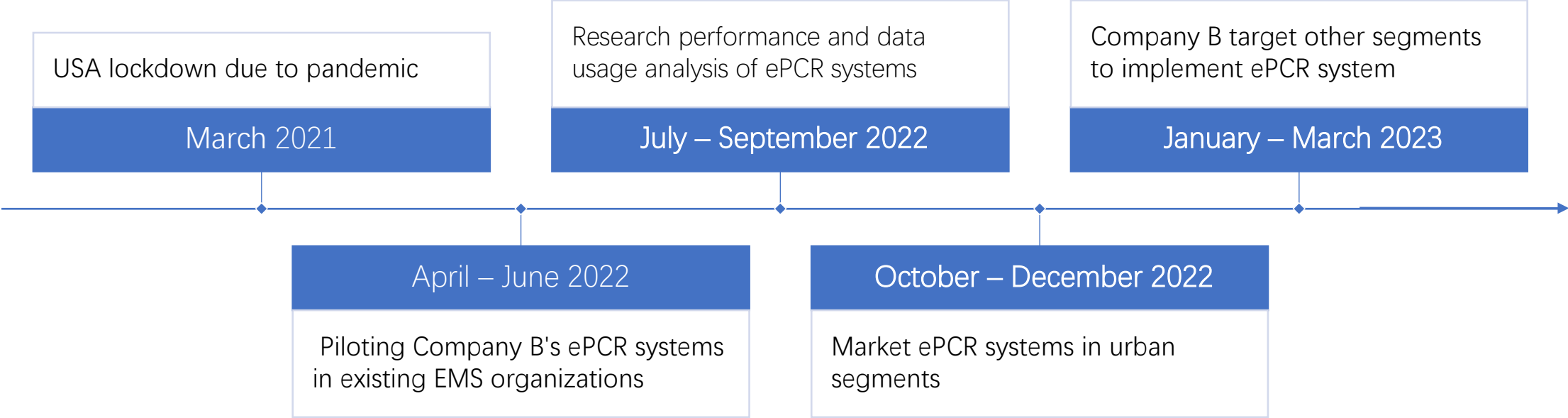


Medium Risk



High Risk

Company B next steps to successfully enter the market and implement use of ePCR systems



Company B necessary steps to enter the markets and mitigate risks for ePCR systems

Next steps	Actions	Success Metrics
Piloting Company B's ePCR systems in existing EMS organizations	<ul style="list-style-type: none">• Work with existing partner EMS organizations• Use partners' to for market• Install system performance and usage tracker	<ul style="list-style-type: none">• Response time quicker• Performance and accuracy increase• Rise in success rate using ePCR
Research performance and data usage analysis of ePCR systems	<ul style="list-style-type: none">• Analyze data from performance and usage tracker• Determine if changes are necessary to enhance system• Hire people to market and create marketing materials	<ul style="list-style-type: none">• Quicker response time• Comparative analysis of before and after using ePCR
Market ePCR systems in urban segments	<ul style="list-style-type: none">• Leverage marketing tactics with existing usage and performance data• Market to urban segments through trade shows and magazines, professional acquaintance, internet, etc	<ul style="list-style-type: none">• Increased demand and usage of ePCR systems to urban EMS segments
Company B target other segments to implement ePCR system	<ul style="list-style-type: none">• Determine and target other segments (rural and suburban) and other EMS organizations• IT system designers make system compatible to receive records in other formats while staying updated	<ul style="list-style-type: none">• Rise in demand for ePCR of potential future users



Appendix A

The price for subscription pricing

Rural : 101-250\$:8 <100\$:32 no opinion:35
 $[(100+ (250-100) /2)*8+100*32]/(32+8)=115$

Urban : 101-250\$:19 250-500\$:1 751-1000\$:1 <100\$:23 no opinion:38
 $[(100+ (250-100) /2)*19+(250+ (500-250) /2)*1+(750+ (1000-750) /2)*1+100*23]/(19+1+1+23)=156.3$

Suburban 1-2: 101-250\$:2 <100\$:9 no opinion:11
 $[(100+ (250-100) /2)*2+100*9]/(2+9)=113.6$

The price for purchase pricing

Rural : <2000\$:19 2001-3500\$:7 3501-5000\$:8 5001-7500\$:2 7501-10000\$:2 No opinion:37
 $[2000*19+(2000+ (3500-2000) /2)*7+(3500+ (5000-3500) /2)*8+(5000+ (7500-5000) /2)*2+(7500+ (10000-7500) /2)*2]/(19+7+8+2+2)=3190.8$

Urban : <2000\$:18 2001-3500\$:9 3501-5000\$:10 5001-7500\$:5 7501-10000\$:5 No opinion:33 >10000\$:2
 $[2000*18+(2000+ (3500-2000) /2)*9+(3500+ (5000-3500) /2)*10+(5000+ (7500-5000) /2)*5+(7500+ (10000-7500) /2)*5+10000*2]/(18+9+10+5+5+2)=4045.9$

Suburban 1-2: <2000\$:8 2001-3500\$:2 3501-5000\$:1 5001-7500\$:2 No opinion:9
 $[2000*8+(2000+ (3500-2000) /2)*2+(3500+ (5000-3500) /2)*1+(5000+ (7500-5000) /2)*2]/(8+2+1+2)=2942.3$

The price for subscription pricing

1-2 : 101-250\$:22 250-500\$:1 751-1000\$:1 <100\$:47 no opinion:62
 $[(100+ (250-100) /2)*22+(250+ (500-250) /2)*1+(750+ (1000-750) /2)*1+100*47]/(22+1+1+47)=138$

3-6 : 101-250\$:5 <100\$:10 no opinion:10
 $[(100+ (250-100) /2)*5+100*10]/(5+10)=125$

7-10 : 101-250\$:1 <100\$:3 no opinion:4
 $[(100+ (250-100) /2)*1+100*3]/(1+3)=118.8$

11-15 : 101-250\$:1 <100\$:1 no opinion:2
 $[(100+ (250-100) /2)*1+100*1]/(1+1)=137.5$

>15 : <100\$:3 opinion:6
100

The price for purchase pricing

1-2 : <2000\$:31 2001-3500\$:13 3501-5000\$:16 5001-7500\$:7 7501-10000\$:4 >10000\$:1 No opinion:61
 $[2000*31+(2000+ (3500-2000) /2)*13+(3500+ (5000-3500) /2)*16+(5000+ (7500-5000) /2)*7+(7500+ (10000-7500) /2)*4+10000]/(31+13+16+7+4+1)=4020.8$

3-6 : <2000\$:6 2001-3500\$:5 3501-5000\$:1 5001-7500\$:2 7501-10000\$:2 No opinion:9 >10000\$:2
 $[2000*6+(2000+ (3500-2000) /2)*5+(3500+ (5000-3500) /2)*1+(5000+ (7500-5000) /2)*2+(7500+ (10000-7500) /2)*2]/(6+5+1+2+2)=3750$

7-10 : <2000\$:4 >10000\$:1 no opinion:3
 $(2000*4+10000)/(1+4)=3600$

11-15 : <2000\$:1 3501-5000\$:1 7501-10000\$:1 no opinion:1
 $(2000*1 +(3500+ (5000-3500) /2)*1 +(7500+ (10000-7500) /2)*1)/3=5000$

>15 : <2000\$:3 3501-5000\$:1 no opinion:5
 $(2000*3 +(3500+ (5000-3500) /2)*1)/(1+3)=2562.5$

Appendix B

The Dollar Size(Subscription/4 years)

Rural : $48(\text{months}) \times 16915(\text{vehicles}) \times 115\$ = 93370800\$$
Urban : $48(\text{months}) \times 62527(\text{vehicles}) \times 156.3\$ = 469102565\$$
Suburban : $48(\text{months}) \times 8339(\text{vehicles}) \times 113.6\$ = 45470899.2\$$

The Dollar Size(subscription)

1-2 : $48(\text{months}) \times 25937(\text{vehicles}) \times 138\$ = 171806688\$$
3-6 : $48(\text{months}) \times 14630(\text{vehicles}) \times 125\$ = 87780000\$$
7-10 : $48(\text{months}) \times 8840(\text{vehicles}) \times 118.8\$ = 50409216\$$
11-15 : $48(\text{months}) \times 6760(\text{vehicles}) \times 137.5\$ = 44616000\$$
>15 : $48(\text{months}) \times 31614(\text{vehicles}) \times 100\$ = 151747200\$$

The Dollar Size(Purchase)

Rural : $16915(\text{vehicles}) \times 3190.8\$ = 53972382\$$
Urban : $62527(\text{vehicles}) \times 4045.9\$ = 252977989\$$
Suburban : $8339(\text{vehicles}) \times 2942.3\$ = 24535839.7\$$

The Dollar Size(purchase)

1-2 : $25937(\text{vehicles}) \times 4020.8\$ = 104287490\$$
3-6 : $14630(\text{vehicles}) \times 3750\$ = 54862500\$$
7-10 : $8840(\text{vehicles}) \times 3600\$ = 31824000\$$
11-15 : $6760(\text{vehicles}) \times 5000\$ = 33800000\$$
>15 : $31614(\text{vehicles}) \times 2562.5\$ = 81010875\$$

Percentage of having expertise support

Rural: $19/75 = 25.3\%$
Urban: $57/82 = 69.5\%$
Suburban: $14/22 = 63.6\%$

1-2: $59/133 = 44.4\%$
3-6: $12/25 = 48\%$
7-10: $7/8 = 87.5\%$
11-15;; $\frac{3}{4} = 75\%$
>15; 100%

Percentage of having infrastructure

Rural: $38/75 = 50.7\%$
Urban: $56/82 = 68.3\%$
Suburban: $14/22 = 63.6\%$

1-2: $78/133 = 58.6\%$
3-6: $13/25 = 52\%$
7-10: $7/8 = 87.5\%$
11-15: $\frac{3}{4} = 75\%$
>15: $7/9 = 77.8\%$