



CircleGx
Virtualized Communication

Circle Gx 5G "Smart City" Strategic Partnership
Delivering the 5G Planted Circle
July 14, 2020



Q: What is 5G?

5G is the 5th generation mobile network. It is a new global wireless standard after 1G, 2G, 3G, and 4G networks. 5G enables a new kind of network that is designed to connect virtually everyone and everything together including machines, objects, and devices.

5G wireless technology is meant to deliver higher multi-Gbps peak data speeds, ultra low latency, more reliability, massive network capacity, increased availability, and a more uniform user experience to more users. New service delivery is instantaneous.



The Company

- Circle Gx Nevada MD Inc.
- Unique **Tier 1 infrastructure** in place, with SaaS & 4G/5G solutions service ready for any radio access infrastructure and scalable to 50m+ users
- We attained a CBRS License via CommScope
- We are the last mile solution

Dell Founders 50 Alumni



Center for Entrepreneurs



Founders Club 50

CircleGx Virtualized Communication

- *Spring Class of 2014*
- *Fortune 50 Support*

Circle Gx is a member of the Dell Founders 50 Club – 2014 class.

This program provided Circle Gx support from Dell in implementing emerging technologies. The Founders 50 is a program focused on key areas of growth for the member companies:

- CEOs of this club have already proven they know how to start and grow a business.
- Dell leverages some of the best practices and Networks from today's accelerators, VC firms, top startup organizations, and then backs them with the power of one of the World's largest technology companies.

Goodwin, Peter

From: Will_Egner@DELL.com
Sent: Tuesday, December 30, 2014 11:24 AM
To: Goodwin, Peter; Eldert.Louisa@telecomgroup.sx
Cc: Corbin_Moore@Dell.com; Franklin_Flint@Dell.com
Subject: Your Potential Participation in our Demo for Mobile World Congress

Mr. Goodwin/Mr. Louisa:

As you have seen at Dell World, Dell is focused on supporting the Telecommunication industry move to Network Function Virtualization (NFV) Solutions leveraging Commercial Off The Shelf (COTS) server hardware. Our Dell Liberty Demo will be on display at Mobile World Congress in Early March 2015. If you would like to participate in this Demo, we will need for you finalize your "Dell Try and Buy agreement" with Corbin and Team by end of next week so that we can support the required timeline of equipment set up for your participation.

We are looking forward to seeing you in Austin, Texas in the next few weeks to kick off this initiative.

Best Regards,

Dr. Will A. Egner

Distinguished Technologist
 CTO of Mobility
Austin, TX
office - 1 512-728-7318 mobile - 1 214-914-3271

**DELL INVITE TO TEST LIBERTY
WITH JACKSONVILLE SHERIFFS
DEPARTMENT**

Why Liberty Quality Scores provide better End User Metrics

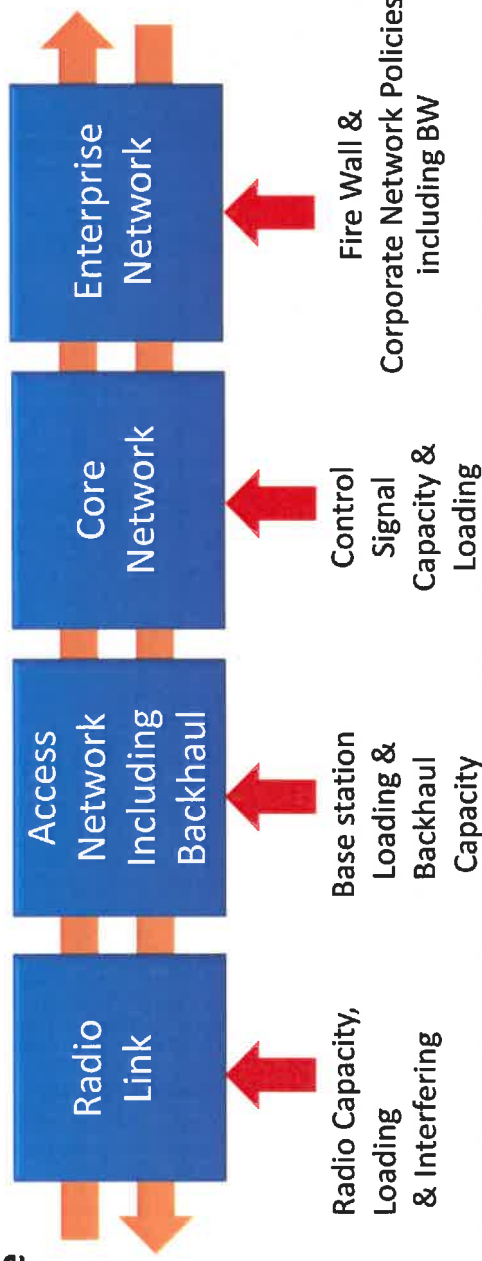


Signal Strength (RSRP) alone is not a good indicator of user experience.

- Phone Bar Levels indicate only how well you can receive the signal from cell tower.
- Bar Levels vary by Manufacturer

Our network studies show low correlation between RSRP and End to End Network Quality primarily due to variance in radio & network congestion.

End User Device



Our E2E Metrics Measure Total Path Quality and Predict Customer Experience Based on Application Types



Mr. Peter C. Goodwin
Circle Gx Nevada MD Inc.
Chief Executive Officer 4315 S.
Lancaster Blvd. Dallas, Texas 75216

June 19th, 2020

Mr. Kendall Dupersey
Chief Executive Officer
St. Marteen Telecommunications Operating Company NV

RE: The Successful Circle Gx 5G core First Office Application (FOA) in St. Marteen

Dear Mr. Goodwin,

Please let this letter serve as a positive reference from the initial test and FOA of the Circle Gx 5G core both our teams accomplished in February 2018. I'm happy to submit we successfully proved the capabilities of your core and its connectivity to our Radio Access Network (RAN) of our Mobile Network.

As you know the company has went through many changes since Hurricane Irma, including Prime Ministers and Board of Directors members changes post hurricane. Currently we are dealing with COVID 19 effects and the lack of tourism and our company is in the midst of conserving all resources at present.

I want to echo our support for Circle Gx, and our intentions to launch the Drum2u once our economy has rebounded. Hopefully with help from your resources we can proceed.

Sincerely,

K. Kendall Dupersey CEO
Telem Group

Reference Letter for Circle Gx First Office Application

The Mission

“Planting 5G Circles”

For Enterprise, Unserved & Underserved

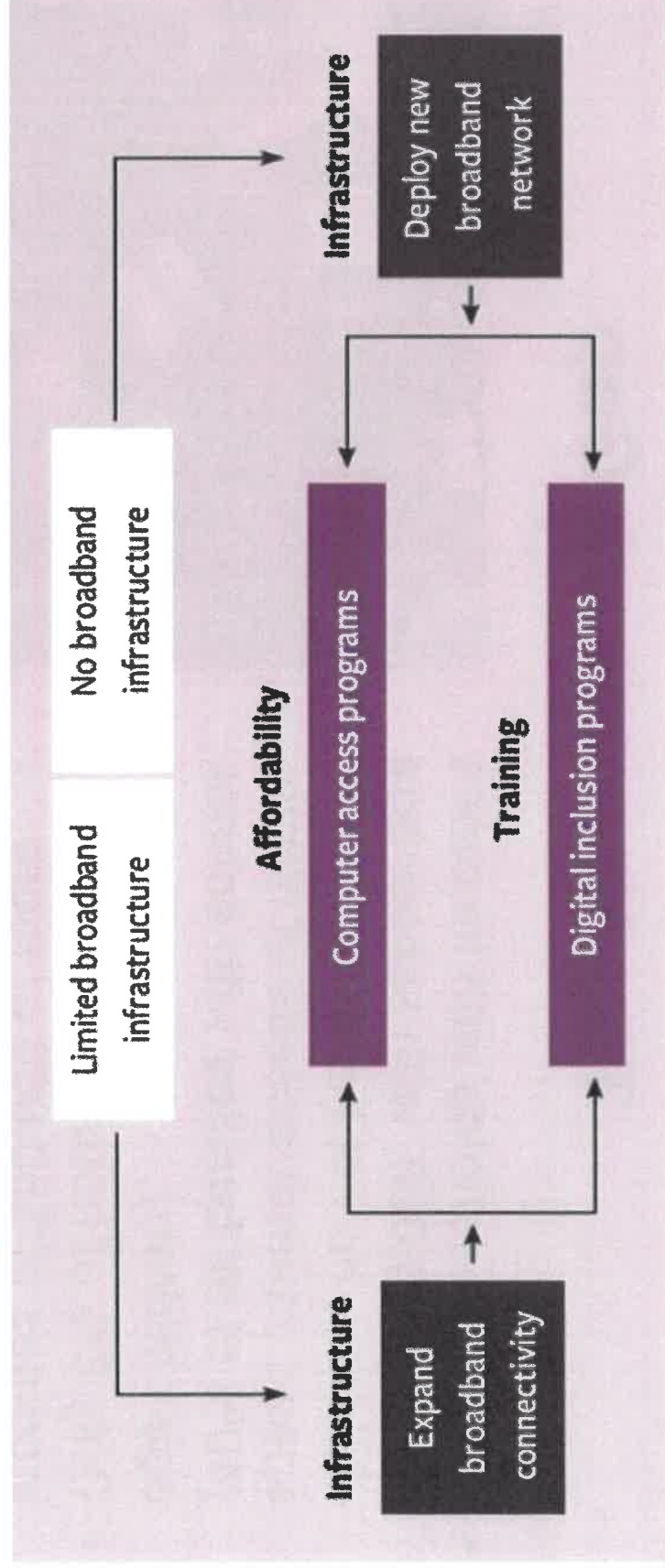
- The objective is to provide our 5G PaaS and IaaS to offer B2B and B2C's
- Partner on Projects we have agreements to implement
- Target Enterprise & Federal Government customers seeking a 5G core solution with an MBE
- Target unconnected Urban and Rural Markets for Broadband
- Revenue share with proceeds

It's all about “use cases”



PAIN

Three Legs of the Stool of Broadband Adoption



The Homework Gap

- 1/3 of households with incomes below \$50,000, with school age children, do not have high speed internet access at home (40% of all families with school-age children)
- Only 8% of households with incomes of \$50,000 or more lack broadband at home





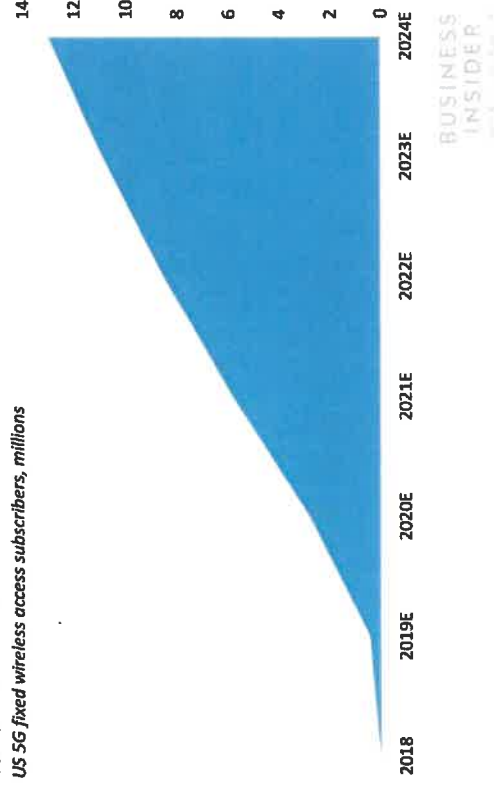
Demand for "The Plant" VIDEO STREAMING



5G Poised To Shake Up Home Internet Through Fixed

Wireless Access

US 5G fixed wireless access subscribers, millions



Source: Business Insider Intelligence estimates, 2019; Verizon, 2018; Cointel, 2018

How long to download a two hour film?



3G
384 Kbps
(2001)



4G
100 Mbps
(2003)



5G
10 Gbps
(2020)

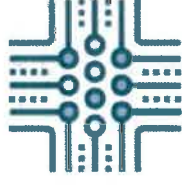
SMART CITY

A smart city is an urban area that uses different types of electronic Internet of things sensors to collect data and then use insights gained from that data to manage assets, resources and services efficiently.

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We Build Smart Cities

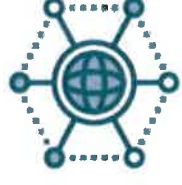
Why is it important?



2.33bn

estimated number of connected things installed within smart cities in 2017, up from 1.64 billion last year

Gartner



\$3.5trn

estimated size of the global smart city market by 2026, a five-fold increase from today

Persistence
Market Research

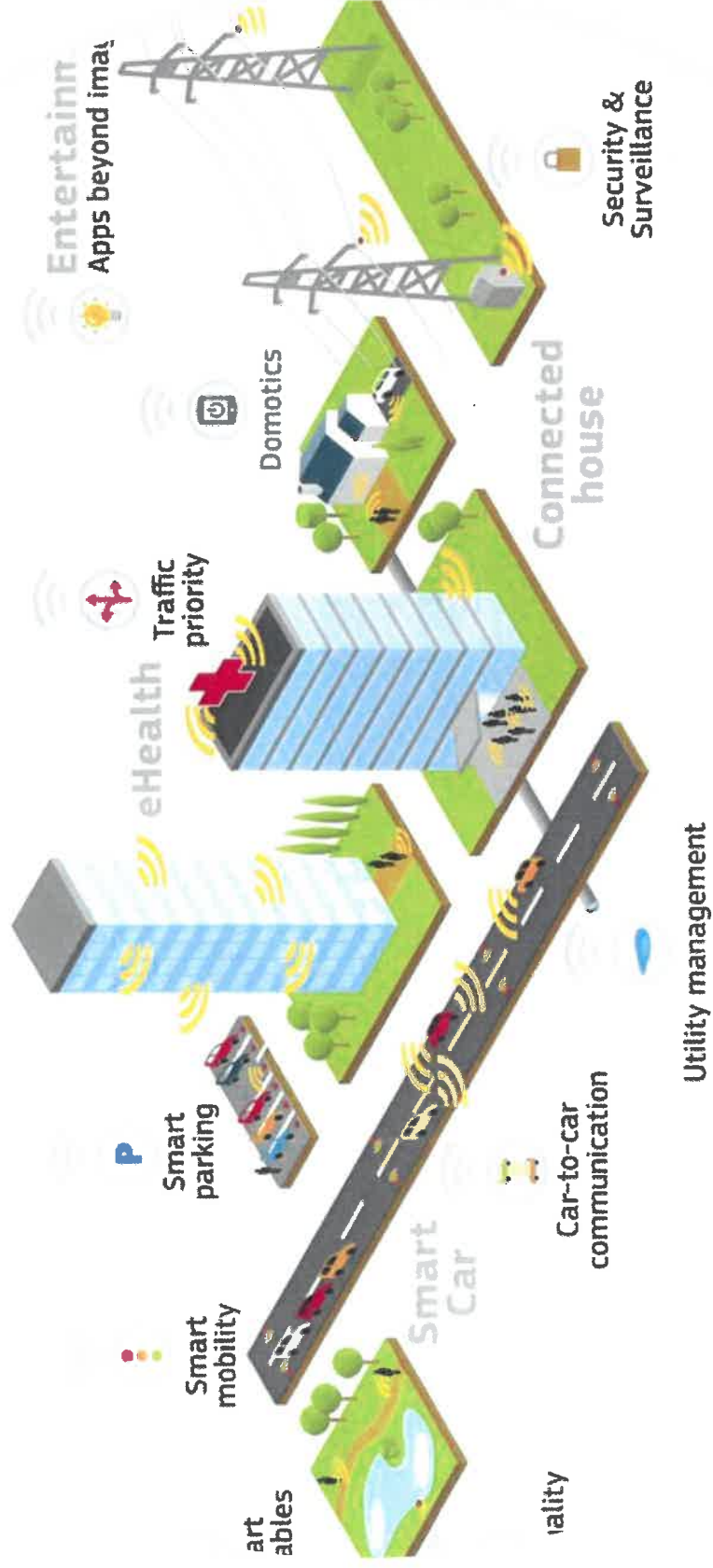


23%

estimated annual growth in the size of the smart infrastructure market – the largest segment of smart city solutions – between 2016 and 2020

Technavio

What 5G is about





5G LED Streetlights

Remote Education using Virtual Reality

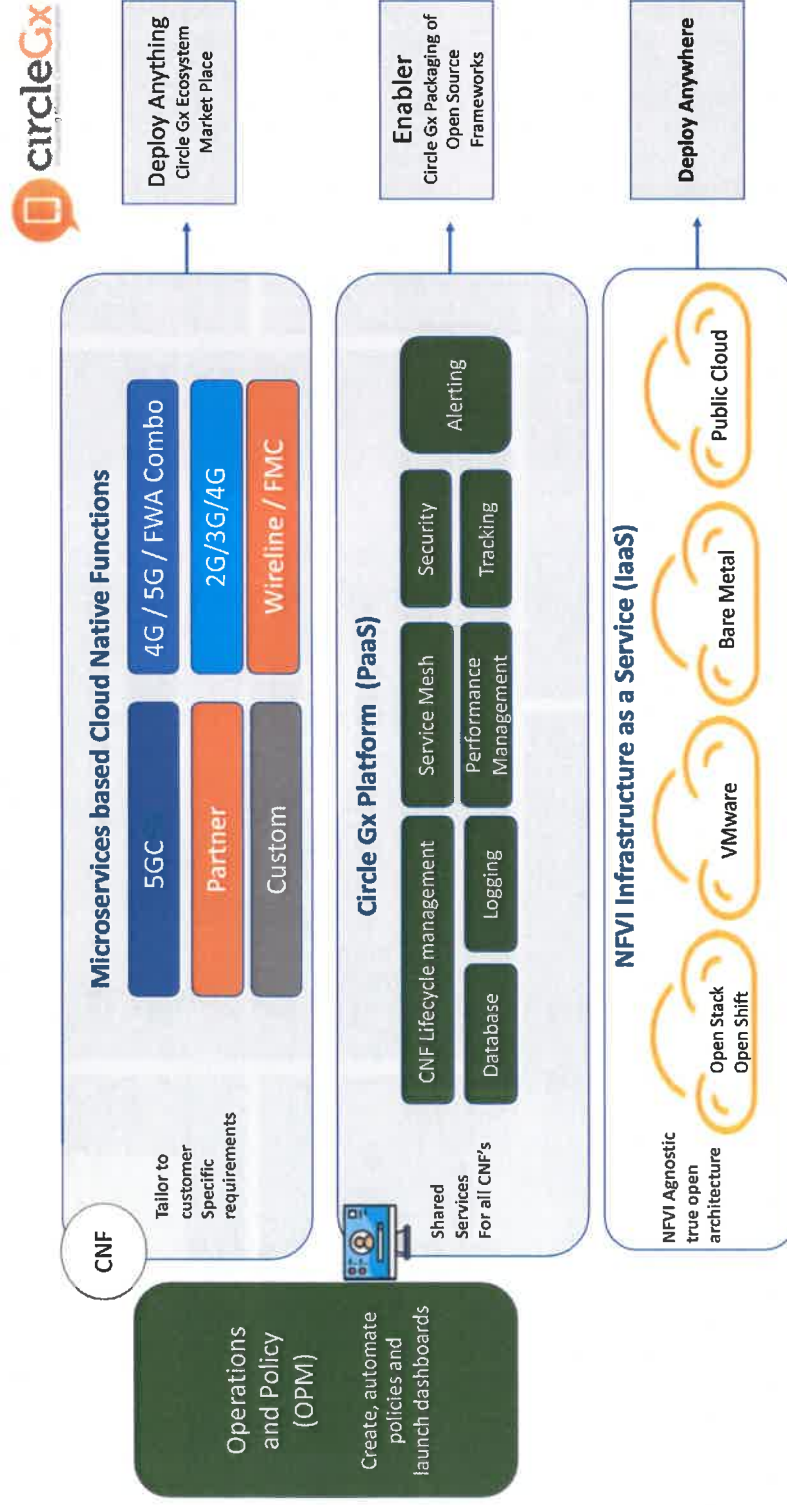


Smart Lights - WIFI



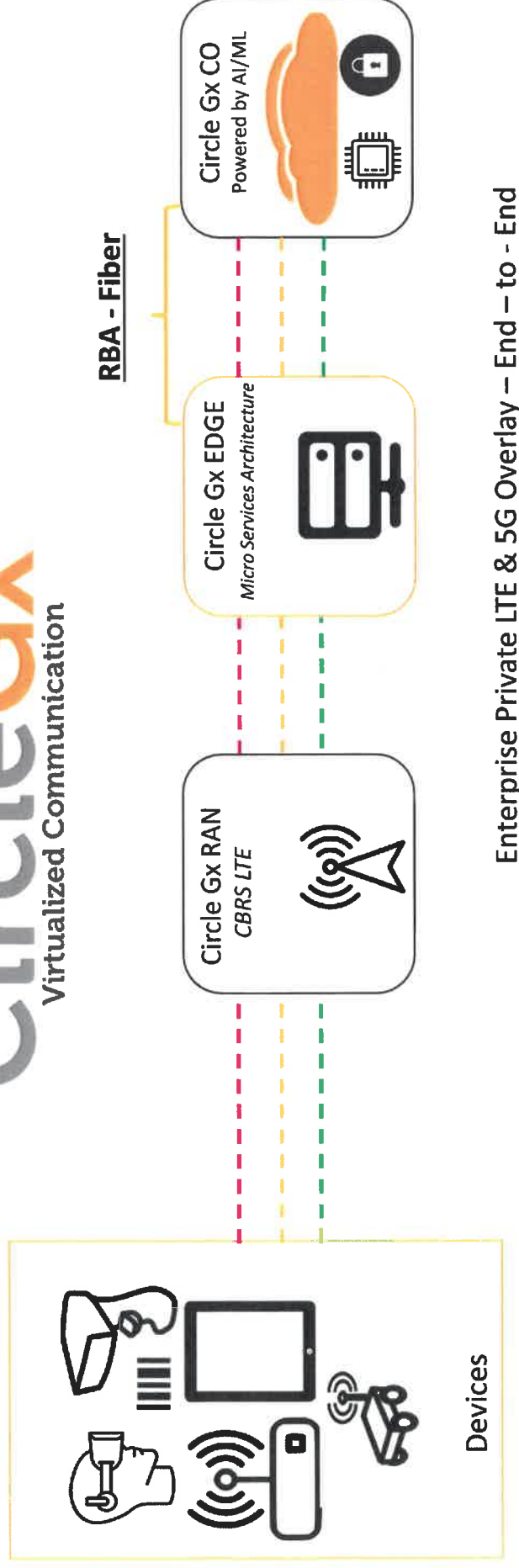
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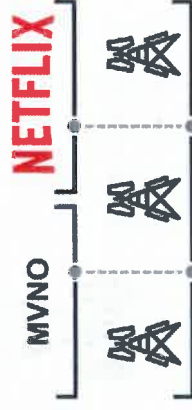


Applications

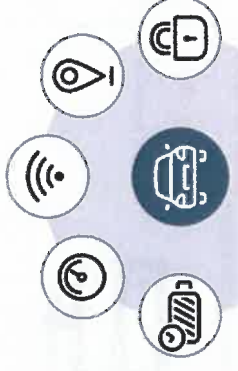
Connectivity Boost for B2C



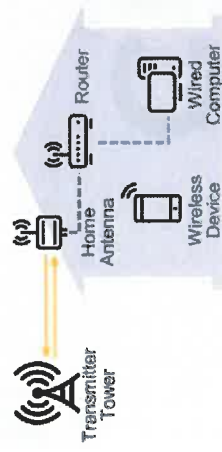
5G Infrastructure-as-a-Service



Connected Car



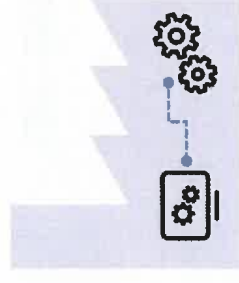
Fixed-wireless Access



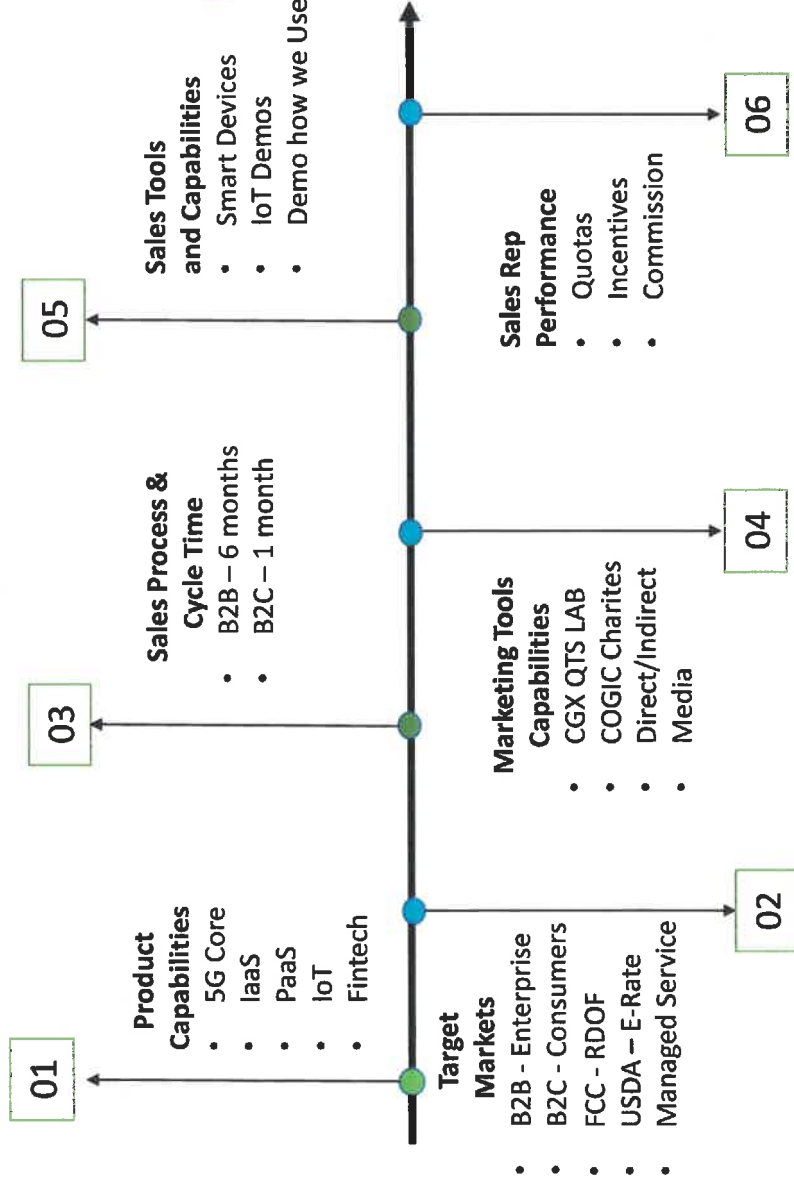
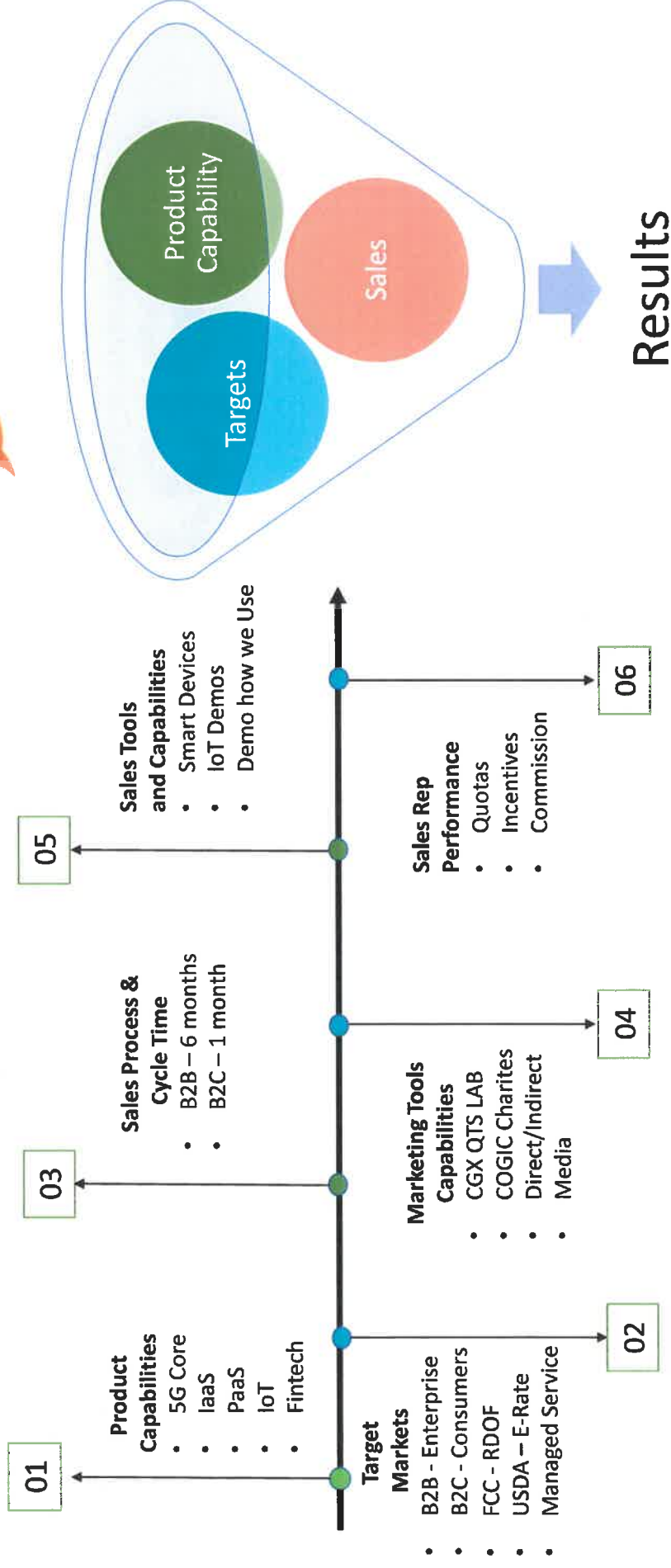
Fixed-like Enterprise Services



Industry 4.0



Go To Market Plan



5G Project Cost

Sources			
	City of Purcellville	\$	1,033,000
Use of Proceeds:			
	Legal		25,000
	Operations (includes Enodes)		500,000
	Engineering		125,000
	Software Licenses		22,500
	Promotion		75,000
	Hardware		135,000
	Sub-total	\$	882,500
	Operating Reserve	\$	150,500
	Total	\$	1,033,000

MANAGEMENT

Circle Gx's management team consists of several industry veterans who have experience building and launching multiple telecom operations within the Caribbean



Peter Goodwin

Founder and Chief Executive Officer

Mr. Goodwin is "planter in chief" and has over 28 years experience in the telecommunications industry having built and launched operations in the Caribbean with Cable & Wireless and several Latin American mobile operators. Mr. Goodwin's career in mobile began with AT&T and Bell South in Los Angeles with LA Cellular as a Government Accounts Manager in 1991. He has led entrepreneurial endeavors with NTC, BCGi, Roamware, Illuminet and VeriSign. NTC was sold to Illuminet/VeriSign in 2000 for \$100 million mainly due to the efforts of Mr. Goodwin. Over Mr. Goodwin's 28-year career, he has held executive positions with LA Cellular, Ameritech, SBC, AT&T, Bell South, PCI and National Telemanagement Corporation. Mr. Goodwin has led the implementation and contract negotiations of several Roaming implementations for networks with TDMA, CDMA, 2G and 3G throughout CALA region, including the first credit card roaming solution in the Caribbean with Cable & Wireless. Mr. Goodwin also led the deployment and design of the next generation roaming technology model and first GSM local breakout roaming solution with Cable & Wireless in 2008. Mr. Goodwin was selected as a member of the Dell Founders Club 50 in 2014 by working with Dell to build the foundation for the Circle Gx 5G service. Mr. Goodwin attended Xavier University Carl Linder School of Business.



Robert Chalnack

Chief Financial Officer

Mr. Chalnack, CPA(FL), MBA, CGMA operated his own consulting firm, providing accounting, tax, operations, and financial services to clients that ranged from small non-profits to billion-dollar organizations. And at Levenshon and Company, an investment banking firm, he raised more than \$250 million while serving as President. He is perhaps best known for his financial turnaround abilities. In addition to working in the financial field, he also teaches. He has served as adjunct professor and a visiting lecturer at Florida International University and Florida Atlantic University, teaching tax research, corporate tax, accounting, individual taxation, partnerships, and basic finance at the graduate and undergraduate level. He has also taught at Rutgers University in New Jersey and has been published in the Journal of Accountancy, CPA Journal, and the Journal of Taxation. The CGMA designation demonstrates international management accounting expertise, determination and commitment to achieving sustainable business success. He received his MBA from CUNY Bernard M. Baruch College and his B.S. in Accounting and Economics from Long Island University.(Magna Cum Laude)

MANAGEMENT



Sudir Anand

Chief Technology Officer - Planning

Mr. Anand has 27 years of telecommunications experience with launching wireless networks, specifically 6 networks in North America, 2 in Europe and 3 in Asia. He has also developed and delivered communications products, services, and solutions for Cincinnati Bell Wireless, Verizon Wireless, Tritel (now AT&T), Powertel (now T-Mobile), Onecomm (now Sprint), Level 3, USWest, Bell Mobility, and many others. He managed the LTE Core implementation and the FOA for Nortel's ATCA (2G/3G/LTE) at Cincinnati Bell Wireless, migrated ALU core FOA in Verizon Wireless in Seattle, and is considered the resident expert for network integration, SS7, transport, Voice and Data Networks, Access Network Core Nodes, Provisioning/SIM, OSS, Billing, and Procurement/Supplier management. Mr. Anand holds a B.Tech. from Toronto's Ryerson University with a Major in Electrical Engineering and Minor in Computer Science. He is a member of the Professional Engineers of Ontario and IEEE.



Robert Johnson

Chief Technology Officer – CTO Group

A sought-after expert in operations and development with a 20-year track record of building and running products, services, platforms, and organizations in wireless, fixed, cable, and international segments. Rob has deep technical and operational expertise with IP technologies and platforms, complex software systems, and mobility. He possesses a unique ability to apply his knowledge to all phases of the product life cycle process, including product ideation, design, development, optimization, marketing, and operations. Rob has extensive vendor and partner management experience, critical to integrating advanced technologies into existing operational environments. He received his BSEE and MSE from the University of Texas at Austin and holds several patents in communications technology.



Paresh Sansare

Chief Information Officer

Distinguished career managing high-profile technical development projects, leading process optimization initiatives and engineering strategic development solutions to support telecom sector and start-ups. Possess strong background in planning and directing integration solutions to meet client business objectives. Keen ability to collaborate with partners to analyze and interpret needs, translate needs into solutions and coordinate efforts of internal / external technology resources to realize deliverables and drive bottom-line profits. Thrive in dynamic environments requiring focused decision-making. Paresh attained his Post Graduate Diploma (MBA) in Telecom Management (Systems & Applied Technology) Symbiosis Institute of Telecom Management — Pune, India and a BS Engineering, University of Nagpur — Maharashtra, India.

MANAGEMENT



Earl Eck

EVP General Manager
Mid Atlantic Region

Earl Eck has a distinguished career developing business strategies, leading process streamlining initiatives, and developing management systems, impacting for some of the most complex systems, business challenges, and customer organizations. He is recognized for his excellence in leading groups of both business and technical teams and has significant entrepreneurial experience.

Mr. Eck has also served as a professor at the University of Northern Virginia, teaching multiple business courses including accounting, strategy, planning, e-commerce, and personal finance. He is a proud graduate of Virginia Tech College of Engineering and earned an Executive MBA from Virginia Commonwealth University.



Franklin Flint

Chief Commercial Officer

Franklin Flint has been involved in the technical delivery of solutions in the telecom, media and entertainment industries for over 30 years. Most recently he served as Chief Technology Officer at Telecommunications Industry Association driving the technological transformation of the association into tech-spaces such as SDN/NFV, IoT, Advanced Wireless (5G), and ITS. Prior to the TIA Franklin led the introduction of Dell Inc. into the Telecommunications market as the marketing executive and go to market strategist. With a strong history as a technology author, speaker, expert, and futurist, Franklin has spoken and moderated at dozens of conferences and appeared regularly in video interviews discussion the future of the Telecom network.



Thomas Goodwin, Jr.
EVP, Business Development

Thomas Goodwin brings 20 years of Management experience. He has managed major accounts for several Fortune 500 companies. He spent ten years with John Hancock with the Long-Term Care division managing hospital accounts, corporate firms and individuals. His telecommunications experience began with Globalcall Communications in 1999. Thomas was instrumental in the attainment and integration of major accounts in the Caribbean and Latin American Region to the NTC platform. These companies would later become a part of VeriSign telecommunications group. Mr. Goodwin is an honors graduate of Xavier University Business School in Cincinnati Ohio and holds a Bachelor of Science Degree in Finance.

ADVISORS



Wilbur Crossley

**Vice Chairman of Circle
Gx Advisory Board;
Operating Partner,
Legacy Equity Advisors**

Mr. Wilbur Crossley is an Operating Partner at Legacy Equity Advisors, where he works closely with the portfolio company management teams to help them achieve rapid growth and superior operating results. He has over 30 years of executive management experience in communications and technology industries. Mr. Crossley has served as the Senior Vice President and Chief Operating Officer at SBC Advanced Solutions, Inc., (now AT&T) and as the Chief Operating Officer of Operational Technologies with a San Antonio-based Environmental, Supply Chain Management, EF&I and information technology services company. Mr. Crossley holds a B.S. degree in mathematics, a B.S. degree in natural science from Mississippi Valley State University, and he completed the Executive Management Program at the University of Georgia.



Kevin Thigpen

Advisor; COO, IT2ME

Mr. Thigpen currently serves as Chief Operating Office at IT2ME. He has over 20 years of experience in the wireless telecommunications industry, having built and launched entire wireless networks from the ground up. He has previously worked as a strategic consultant for TELiServe, having helped launch the company's GPS and Location Based Services (LBS) wireless business solutions. He successfully negotiated strategic agreements with Sprint/Nextel and other key business partners to deploy GPS applications across the United States, before helping the company's acquisition to Actsoft in 2006. At Boston Communications Group (BCGI), he served as Vice President and General Manager of the Prepaid Wireless Services Division. He holds a B.S. in Economics from the Wharton School of Business at the University of Pennsylvania dual specialized in Finance and Marketing.



Alfred Boschulte

**Advisor, Co-Founder and
Chairman
Boschulte-Schnee
Consulting Group**

Mr. Boschulte is an internationally noted telecom and business expert who has been a CEO for six different companies, including Chairman and CEO of NYNEX Mobile; (Now Verizon), Chairman/CEO of IWO, Managing Dir./Founder of Excelcomindo Pratama, CEO and President of SKYOPTIX, President Detecon USA, and Interim CEO and Vice Chairman of Virgin Islands Next Generation Network (responsible for the design and implementation of a Gigabit broadband network to serve the US Virgin Islands with 60 million USD of Federal ARRA grants). Mr. Boschulte is a retired senior officer of both AT&T and Verizon, having run major line operating organizations over a period of 30 years. He has a BME and an MSME from the City University of New York and is a graduate of the Bronx High School of Science.

ADVISORS

- **DR. JAI MENON**

- **Chief Scientist, IBM Fellow Emeritus**

- Jai is the Chief Scientist at Cloudistics, which he joined after having served as CTO for multi-billion-dollar Systems businesses (Servers, Storage, Networking) at both IBM and Dell.
- Jai was an IBM Fellow, IBM's highest technical honor, and one of the early pioneers who helped create the technology behind what is now a \$20B RAID industry. He impacted every significant IBM RAID product between 1990 & 2010, and he co-invented one of the earliest RAID-6 codes in the industry called EVENODD. He was also the leader of the team that created the industry's first, and still the most successful, storage virtualization product.
- When he left IBM, Jai was Chief Technology Officer for Systems Group, responsible for guiding 15,000 developers. In 2012, he joined Dell as VP and CTO for Dell Enterprise Solutions Group. In 2013, he became Head of Research and Chief Research Officer for Dell.
- Jai holds 53 patents, has published 82 papers, and is a contributing author to three books on database and storage systems. He is an IEEE Fellow and an IBM Master Inventor, a Distinguished Alumnus of both Indian Institute of Technology, Madras and Ohio State University, and a recipient of the IEEE Wallace McDowell Award and the IEEE Reynold B. Johnson Information Systems Award. He serves on several university, customer and company advisory boards.



