EasternManagementGroup

**2020-2027 SIP Global Market
7-Year Forecast and Analysis**

2020

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Research Taxonomy

▶ 2020-2027 SIP Global Market 7-Year Forecast and Analysis is based on interviews with vendors, data from more than 47,500 IT manager customer completed surveys, modeling by our analysts, and Eastern Management Group's Monitor^{SM} database containing more than 20 years of communications market data

  ▪ A discrete set of 4,000 IT managers contributed data for this report. They represent businesses from one employee to more than one million, and 20 vertical markets in seven world regions

▶ Fortune Magazine has described the Eastern Management Group as the leading analyst in the industry. This report reflects our continuing effort to maintain the distinction

Seven World Regions Analyzed

Seven World Regions Evaluated for SIP

United States	Middle East, Africa (MEA)
Canada	Latin America (LATAM)
Western Europe	Asia Pacific (APAC)
Eastern Europe	

Source: The Eastern Management Group, Inc.

Three Industry Sectors Evaluated for SIP

Industrial Sector Businesses
Commercial Sector Businesses
Government, Education, and Medical Sector Businesses

Source: The Eastern Management Group, Inc.

20 Vertical Industries Analyzed

Vertical Markets Evaluated for SIP Use

Aerospace & Defense	Communications SP	Electronics & Information Technology	Healthcare	Media and Entertainment
Automotive	Construction and Engineering	Energy and Utilities	Hospitality	Professional Services
Banking and Finance	Consumer Package Goods	Federal Government	Insurance	Retail
Chemicals and Petroleum	Education	State/Local Government	Life Sciences	Travel and Transportation

Source: The Eastern Management Group, Inc.

53 SIP Trunking Providers Analyzed

Providers Evaluated

Company		
8x8	GTT	Spectrum
AT&T	IntelePeer	Sprint
Bandwidth	Inteliquent	Tata
BICS	Intrado	TDS
BroadSoft	Level 3	Telefonica
BT	Masergy	Telstra
CenturyLink	MegaPath	TPx
Charter	Mitel	T-Systems
Cisco	Nexmo	Twilio
Comcast	Nextiva	Verizon
Consolidated Coms.	NTT	Vitelity
Deutsche Telekom	Onvoy	Vodafone
Electric Lightwave	Orange Business	Vonage
FairPoint	Plivo	Voxbone
Flowroute	RingCentral	Voyant
Frontier	Rogers	West
Fusion	Sangoma	Windstream
Global Cloud Exchange	Shoutpoint	

Source: The Eastern Management Group, Inc.

SIP Market Conclusions

Market Conclusions

▶ Worldwide, nearly 100% of all companies have SIP capability on new phone systems

 ▪ In 2020 80.3% of companies worldwide use SIP trunks

 ▪ By 2027 96% of all network traffic will be SIP

▶ SIP growth is being propelled by many drivers, but principally cost

▶ Over the next 7-years SIP will continue to grow as 1) incumbent carriers, worldwide, turn off the PSTN 2) corporate branch office use increases 3) UCaaS, CCaaS, CPaaS, grows 4) productivity improving UC applications like voice, messaging, and collaboration applications roll-out 4) demand for phone numbers to countries and cities increases

 ▪ It will take years before all traditional networks are displaced/replaced

▶ No provider dominates the SIP trunking market, leaving 1) opportunity for vendors to bring-up new services 2)incumbent providers to grow share 2) new vendors to enter the SIP market

Market Conclusions

▶ SIP trunking is a $16.6 billion-dollar global market in 2020

  ▪ The market is growing at a compound rate of more than 7% annually

  ▪ Eastern Management Group projects the market to be $26.6 billion in sales by 2027

▶ More than 90% of IT managers say SIP is very important to their business today

  ▪ This is consistent across all world regions

▶ IT managers are investing in SIP products and services at a faster rate than the worldwide growth of IT expenditures

SIP Market Forecast Backdrop

SIP Orientation

SIP Protocol

► Session Initiation Protocol (SIP) is a communications protocol (application layer protocol) for signaling and controlling multimedia communication sessions such as voice and video calls

- SIP is designed to be independent of the underlying transport layer
- It is used to create, modify, and terminate sessions with one or more participants in an IP network
- A session can be a straightforward two-way phone call or it can be a multi-media conference session with many persons participating
- SIP is only involved in the part of a communication session that has signaling
- When video or voice calls are set up or torn down, SIP is used

► A SIP trunk replaces the need for traditional analog, T1-based Public Switched Telephone Network (PSTN) connections, with termination instead provided over a company's public or private Internet connection through a SIP provider

SIP Orientation

► SIP trunks are typically offered as a virtual service that shares a common access circuit with other Internet Protocol (IP) based network services, such as private Multiprotocol Label Switching (MPLS) networks or internet services

► Most SIP trunk service providers offer simplified pricing, by bundling advanced features along with some amount of Direct Inward Dialing (DID) numbers and long-distance minutes, as part of the fixed monthly SIP trunk service fee

► Enterprises can easily connect to multiple service providers over SIP, and route their outbound traffic to optimize costs

- Site-to-site traffic can be carried over the enterprise MPLS network, eliminating Public Switched Telephone Network (PSTN) fees

SIP Value Proposition

► SIP is utilized to control communication sessions for multimedia that are placed over Internet Protocol (IP) networks

  ▪ Applications of SIP are voice, instant messaging, contact center, conferencing (e.g., video), data collaboration, online gaming, and application sharing

► SIP systems deliver features that enhance users' mobility and productivity, while securing cost-saving advantages over T1/E1 primary rate interface (PRI) circuits

► SIP trunking can reduce telecom expenses by up to 50%
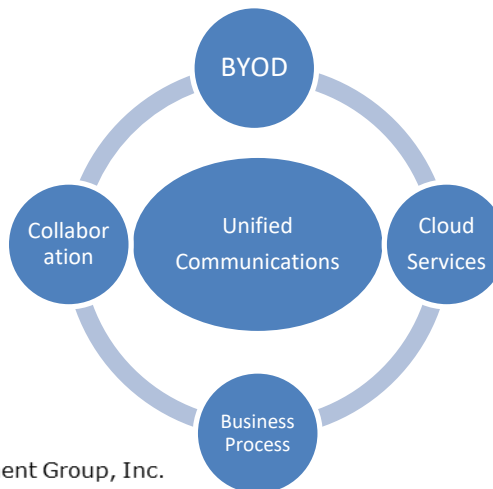
Source: The Eastern Management Group, Inc.

SIP Facets

Five SIP Facets

► Cisco reports that SIP supports five facets of establishing and terminating multimedia communications

- User location: Users can move to other locations and access their telephony or other application features from remote locations

- User availability: This involves determination of the willingness of the called party to engage in communications

- User capabilities: Here, the media and media parameters to be used are determined

- Session setup: Point-to-point and multiparty calls are set up, with agreed session parameters

- Session management: This includes transfer and termination of sessions, modifying session parameters, and invoking services

PSTN End-Of-Life

► Analog, ISDN2 and ISDN30 voice services are at end-of-life

► Analog equipment underpinning the PSTN is outdated, it is costly to maintain and knowledge of the infrastructure is diminishing

► While the switch-over is voluntary at present, it will ultimately become mandatory for both home and business consumers. In some European countries, telecoms providers aim to switch off the PSTN as early as now according to Spearline, a network testing company

  ▪ Globally, the target switch-off is by 2030

► Many of the largest incumbent operators, like AT&T and Deutsche Telecom, have announced end-of-life dates for their legacy PSTN networks

► Telecom carriers are accelerating the transition from PSTN (Public Switched Telephone Network) to all-IP communications

► SIP will grow as phone companies turn off the PSTN

► Despite the growth of SIP, it will be decades before all traditional networks are displaced/replaced

Conversion Timetable to All IP Networks

Operator	Transition Date
AT&T	2020
Verizon	2020
BT	2025
NT	2025
Telstra	2021
Deutsche Telecom	2018
Swisscom	2017

Source: BroadSoft

New Technologies Driving SIP Trunking Growth

Customer Demand for UC Applications

SIP Trunking Enables Unified Communications Applications

► Businesses run a lot of UC applications enabled by SIP

- The chart on the following page shows customer demand for unified communications applications and the importance each to IT managers surveyed by Eastern Management Group

Customer Demand for 12 UC Applications

UC Applications Required by All Businesses

Application	Very Important	Moderately Important	Low Importance
Instant messaging/chat	62	16	22
Unified messaging	72	13	15
Data sharing	62	18	20
Collaboration	72	15	13
Presence information	74	15	12
Calendaring	63	17	20
Mobility	83	9	8
"Bring your own (mobile) device"	76	11	13
Speech recognition	56	21	23
Video	65	19	16
VoIP	92	6	2
SIP	91	6	3
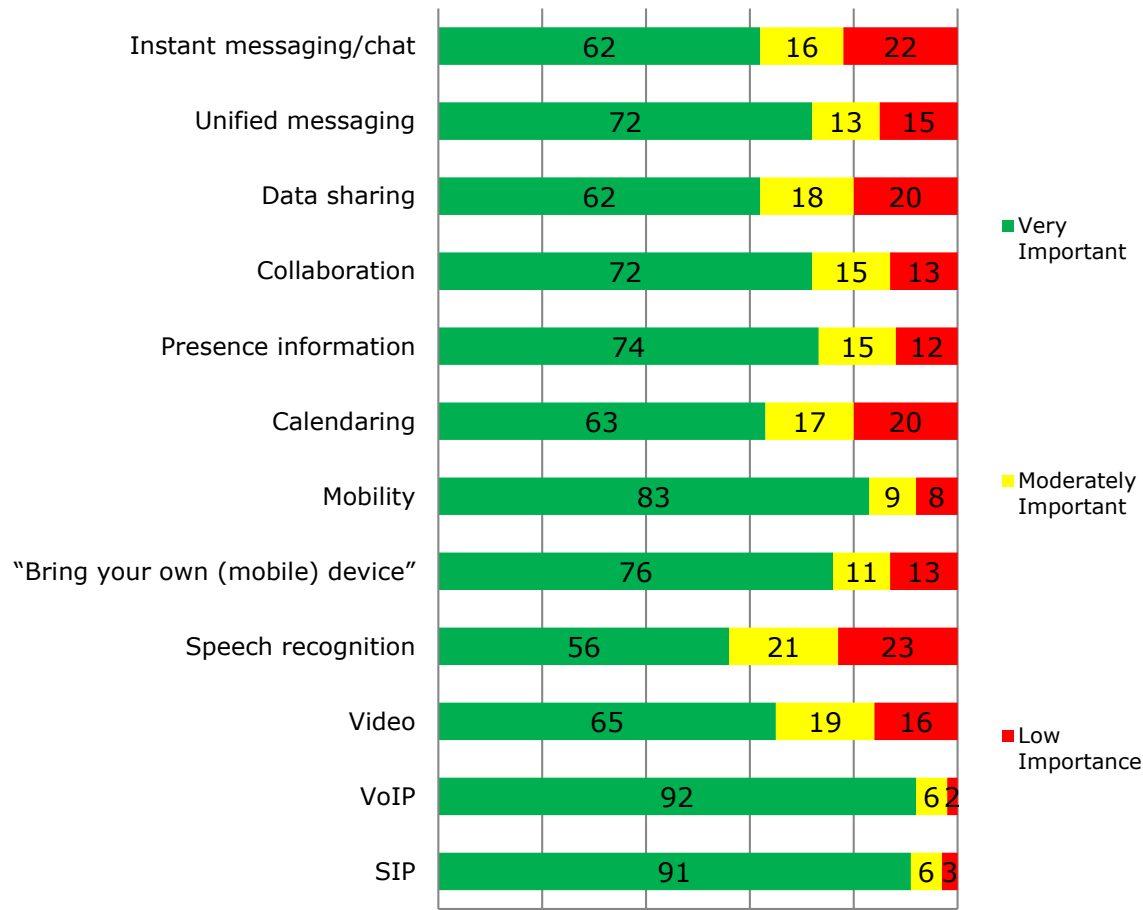
UCaaS Year/Year Demand Driving SIP Growth

Year/Year Hosted PBX Shipments

► In 2020 Hosted PBX Is 18% of All PBX Shipments

Percent of All PBX Shipments

Worldwide Hosted Phone System Shipments

18.1

8.7

6.9

3.6

| 2010 | 2011 | 2012 | 2019 |
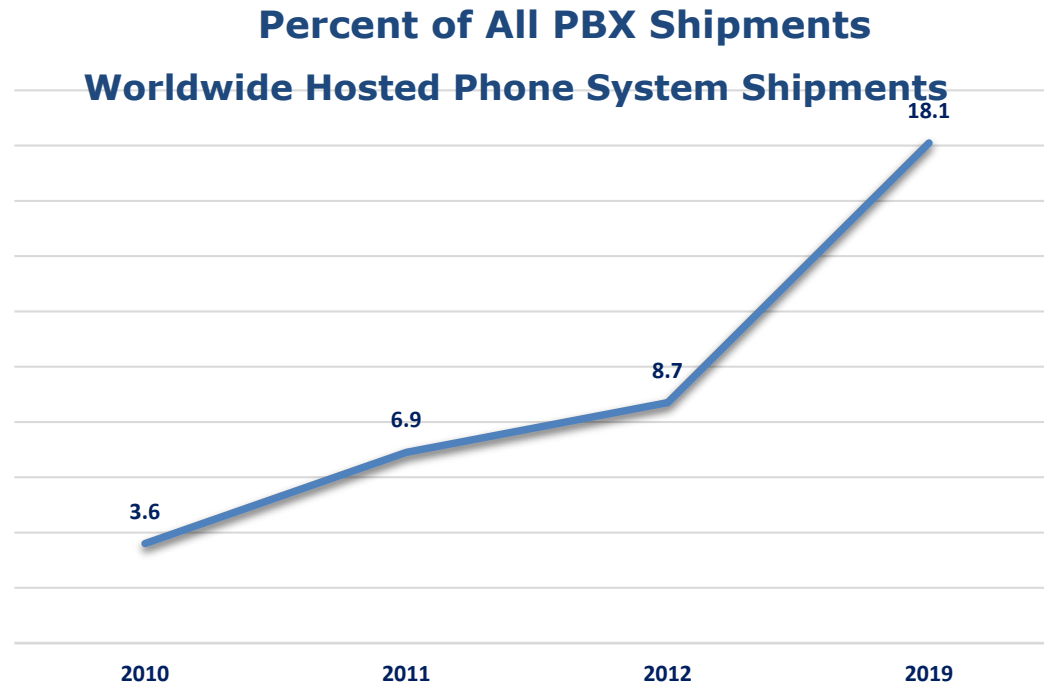
Source: The Eastern Management Group, Inc.

5-Year Video Demand Driving SIP Growth

Lesser Used Applications Contributing to SIP Trunking Growth

Video		
	Use Today	**Use in 5-Years**
Worldwide	43%	75%

Percent of Businesses Using Video by Region		
Region	**Use Today**	**Use in 5-Years**
North America	43	71
EMEA	39	75
LATAM	44	84
APAC	53	83

Source: The Eastern Management Group, Inc.

5-Year CPaaS Demand Driving SIP Growth

Lesser Used Applications Contributing to SIP Trunking Growth

CPaaS		
	Use Today	**Use in 5-Years**
Worldwide	10%	20%

Percent of Businesses Using CPaaS by Region		
Region	**Use Today**	**Use in 5-Years**
North America	9	16
EMEA	9	20
LATAM	11	31
APAC	14	27

Source: The Eastern Management Group, Inc.

5-Year CCaaS Demand Driving SIP Growth

Lesser Used Applications Contributing to SIP Trunking Growth

CCaaS		
	Use Today	**Use in 5-Years**
Worldwide	40%	50%

Percent of Businesses Using CCaaS by Region		
Region	**Use Today**	**Use in 5-Years**
North America	30	35
EMEA	48	60
LATAM	52	68
APAC	53	68

Source: The Eastern Management Group, Inc.

5-Year SBC Demand Driving SIP Growth

Lesser Used Applications Contributing to SIP Trunking Growth

SBC		
	Use Today	**Use in 5-Years**
Worldwide	28%	42%

Percent of Businesses Using SBC by Region		
Region	**Use Today**	**Use in 5-Years**
North America	27	39
EMEA	28	42
LATAM	30	49
APAC	26	45

Source: The Eastern Management Group, Inc.

Quantified SIP Importance to IT Managers

SIP Importance to IT Managers

Quantified SIP Importance to IT Managers Overall

► More than 90% percent of IT managers say SIP is very important to their business

  ▪ This is consistent across all world regions

SIP Importance to IT Managers Today
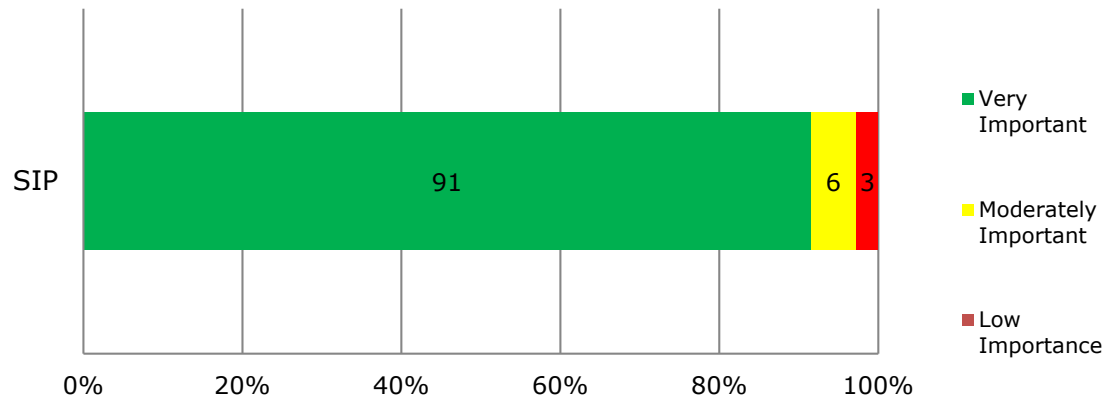
Source: The Eastern Management Group, Inc.

SIP Importance by World Region

Quantified SIP Importance to IT Managers by Region
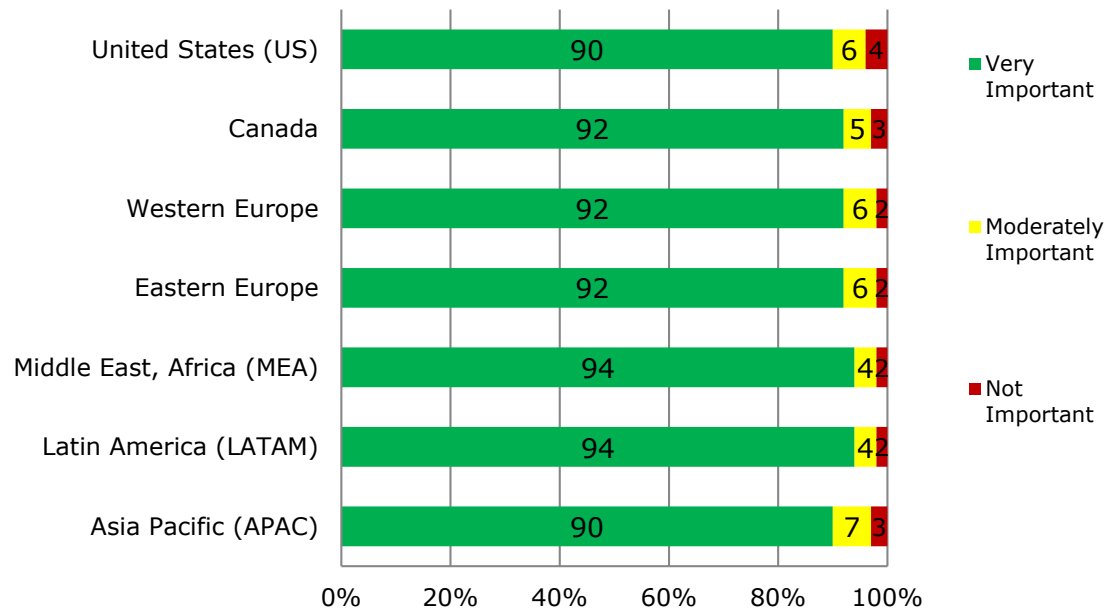
Source: The Eastern Management Group, Inc.

SIP Trunking 7-Year Market Forecast

SIP Use by World Region

Rapid SIP Growth in All World Regions

Percent of businesses already using SIP trunking by region

Region	Percent - 2020	Percent - 2017
North America	78%	70%
Western Europe	87%	82%
Eastern Europe	93%	
MEA	77%	
LATAM	76%	73%
APAC	76%	72%
All Regions	80%	70%

Source: The Eastern Management Group, Inc.

SIP Trunking Revenue

7-Year SIP Trunking Revenue Forecast

	Sales ($ Billions)									
	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
Global	14.4	15.4	16.6	17.8	19.1	20.4	21.8	23.3	24.9	26.6

Source: The Eastern Management Group, Inc.

SIP Trunking Market

SIP Trunking Growth Versus IT Spending Growth

▶ The SIP trunk market grows at more than 1.7 times the rate of worldwide IT spending

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
SIP Trunk Growth	7.3%	7.6%	7.6%	7.8%	7.8%	8.0%	8.0%	8.0%	8.0%	8.0%
IT Spending Growth	4.2%	4.3%	3.7% ①	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

Source: The Eastern Management Group, Inc.

① Source: Statista based on Civid-19 forecast

SIP Trunk Usage 2020

Percent of Businesses Using SIP Trunks

Percent of Businesses Using SIP Trunks Worldwide		
	Use SIP	**Do Not Use SIP**
Worldwide	80.3	19.7

Percent of Businesses Using SIP Trunks by Region		
Region	**Use SIP**	**Do Not Use SIP**
US	77	23
Canada	83	17
Western Europe	87	13
Eastern Europe	93	7
MEA	77	23
LATAM	76	24
APAC	78	22

Source: The Eastern Management Group, Inc.

SIP Trunk Usage 2020

Percent of Businesses Using SIP Trunks by Employee Size

Percent of Businesses Using SIP Trunks Worldwide	
Employees	Use SIP
Small – Under 50	80
Small – 50-299	78
Mid-market - 300-500	85
Enterprise – More than 500	82

Source: The Eastern Management Group, Inc.

SIP Importance In The Future

In 5-years 91% of Businesses Worldwide Will Use SIP Trunks

Company Size – Employees	Percent That Will Use SIP Trunks in 5-years
Small – Under 50	92
Small – 50-299	89
Mid-market - 300-500	95
Enterprise – More than 500	90

Source: The Eastern Management Group, Inc.

SIP Importance In The Future

In 5-years 91% of Businesses Worldwide Will Use SIP Trunks

World Region	Percent That Will Use SIP Trunks in 5-years
North America	89
Western Europe	95
Eastern Europe	96
MEA	87
LATAM	90
APAC	90

Source: The Eastern Management Group, Inc.

Vendor Market Share

▶ There are many SIP trunk vendors around the world

▶ Based on survey information collected from more than 4,000 IT managers, the following charts show the SIP trunking market effectiveness of almost 50 providers

  ▪ IT managers identified their primary SIP provider

    – Data is representative of a large SIP provider market

Market Share by SIP Trunking Provider

2020 SIP Trunk Vendor Market Share

Survey n=4,000

Company	Market Share (Percent)
8x8	0.26
AT&T	3.00
Bandwidth	1.52
BICS	0.13
BroadSoft	0.61
BT	1.26
CenturyLink	1.26
Charter	0.22
Cisco	4.87
Comcast	1.39
Consolidated Communications	0.26
Deutsche Telekom	0.70
Electric Lightwave	0.04
Flowroute	2.65
Frontier	0.22
Fusion	0.52

Source: The Eastern Management Group, Inc.

Market Share by Provider

2020 SIP Trunk Vendor Market Share

Survey n=4,000

Company	Market Share (Percent)
Global Cloud Exchange	0.17
GTT	0.17
Intelepeer	0.52
Inteliquent	0.17
Intrado	0.04
Level 3	0.74
Mitel	0.52
Nextiva	0.39
NTT	0.22
Onvoy	0.09
Orange	1.22
Plivo	0.17
RingCentral	0.57
Rogers	0.26
Spectrum	1.09
Tata	0.91

Source: The Eastern Management Group, Inc.

Market Share by Provider

2020 SIP Trunk Vendor Market Share

▶ Survey n=4,000

Company	Market Share (Percent)
TDS	0.17
Telefonica	1.65
Telstra	0.61
TPx	0.22
T-Systems	0.65
Twilio	2.78
Verizon	0.91
Vitelity	1.57
Vodafone	1.70
Vonage	0.70
Voxbone	0.43
Voyant	0.65
West	0.09
Windstream	0.39
Other	51.43

Source: The Eastern Management Group, Inc.

SIP Trunking Prices

SIP Trunking Model Prices

Typical SIP Channel Prices				
	Metered 2018	**Metered 2020**	**Channelized 2018**	**Channelized 2020**
Flowroute	$0.0098 p/min.	$0.00833 p/min.		
Twilio	$0.0070 p/min.	$0.0045 p/min.		
SIP.US			$24.95 p/month	$24.95 p/month

Source: Flowroute, Twilio, SIP.US, The Eastern Management Group, Inc.

Typical Traditional Network Prices		
	Business Access Line	**2-Way PBX Trunk**
AT&T	$65.00 p/month	$33.49 p/month

Source: AT&T, The Eastern Management Group, Inc.

SIP trunk prices are declining 5-7% per year

SIP Trunking Go-To-Market

Provider-Own Networks

► There are many approaches for moving customer traffic over SIP provider networks, as the following examples show:

► <u>Oracle</u> is provider of SIP trunks

- Message to enterprises is that Oracle SIP trunks offer an IP based, voice trunk service that uses SIP to connect an IP PBX to the Public Switched Telephone Network.

- Delivered over Oracle's own fiber IP network, Oracle SIP trunks provide a reliable and secure voice solution, in which voice traffic is not routed over the public Internet.

- Since <u>Business Class</u> (an Oracle brand) SIP trunks are sold by the number of call paths, this service delivers a highly scalable, cost-efficient alternative to traditional voice services

Small Customer Targeting

▶ <u>Time Warner Cable</u>, a Spectrum company, is an Oracle competitor

- Time Warner Cable positions itself as a SIP trunk alternative for a smaller, newer to SIP, customer

- VoIP can be routed over PBX trunks via a media gateway to take full advantage of VoIP's capabilities

- Businesses will deploy SIP trunks and typically route these calls via a session border controller

White Label

- ► <u>Tata</u> white label for SPs
  - ▪ There are few providers who can cover all major regions of the world with their own voice network infrastructure, so Tata white label is good for that
  - ▪ An approach such as offered by Tata, may be attractive to many providers, integrators, resellers and large enterprise customers that need global reach
- ► <u>Siptrunk.com</u> can create a wholesale account for a customer in 10 minutes and provision in 60 seconds.
  - ▪ The platform has been purposefully designed to make quoting, provisioning, billing and managing SIP trunk customers easy
  - ▪ Siptrunk.com is a SIP trunking provider for agents, dealers, VARs, manufacturers, distributors and master agents, looking to build a monthly recurring revenue stream selling SIP trunks

SIP Trunking Usage

SIP Trunking Percent Total Network Traffic

SIP Traffic as a Percent of Total Network Traffic

	Percent								
	2019	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
Global	65.7	70.0	74.3	78.6	82.9	87.0	90.6	93.4	96.1

Source: The Eastern Management Group, Inc.

SIP Trunking Traffic by Customer Size

2020-2027 SIP Trunking Traffic by Customer Size

Employees	Percent of All Network Traffic									
	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
1-10	62.3	66.1	69.9	73.9	78.2	82.7	87.5	89.3	91.0	92.9
11-50	63.1	67.3	71.4	75.7	79.4	83.3	87.4	89.1	90.9	92.7
51-100	61.9	66.2	70.4	74.9	79.6	84.7	90.1	91.9	93.7	95.6
101-500	57.9	62.4	66.9	71.7	76.9	82.4	88.3	90.1	91.9	93.7
501-1,000	62.9	66.2	69.6	73.2	76.9	80.9	85.1	86.8	88.5	90.3
1,001-5,000	60.8	65.8	70.8	75.2	80.0	83.2	86.5	88.2	90.0	91.8
5,001 - 20,000	57.4	64.2	70.9	74.3	77.5	81.4	85.5	87.2	89.0	90.7
20,000 +	55.6	62.5	69.5	75.3	80.9	83.6	86.4	88.1	89.9	91.7

Source: The Eastern Management Group, Inc.

SIP Trunking Traffic by Phone System Size

2020-2027 SIP Trunking Traffic by Telephone System Size

End Points	Percent of All Network Traffic									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
1-10	59.8	64.8	69.7	75.0	80.6	86.7	93.3	95.2	97.1	97.1
11-25	63.5	67.4	71.4	75.6	80.1	84.9	90.0	91.8	93.6	95.5
26-50	60.0	63.9	67.9	72.2	76.7	81.5	86.6	88.3	90.1	91.9
51-100	63.3	67.7	72.0	76.6	81.4	86.6	92.1	93.9	95.8	97.7
101-500	59.7	63.7	67.6	71.7	76.1	80.8	85.8	87.5	89.3	91.1
501-5,000	62.4	67.2	72.1	77.4	83.0	85.9	88.9	90.7	92.5	94.3
5,000 +	68.9	74.9	80.9	84.9	87.3	90.9	94.6	96.5	96.5	96.5

Source: The Eastern Management Group, Inc.

SIP Trunking Traffic by World Region

2020-2027 SIP Traffic by World Region

Region	Percent of All Network Traffic									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
USA	60.9	65.5	70.1	75.0	80.3	85.9	91.9	93.7	95.6	97.5
Canada	61.6	65.9	70.2	74.8	79.7	83.9	88.3	90.1	91.9	93.7
Western Europe	68.4	72.4	76.5	80.8	85.4	90.2	95.3	97.2	97.2	97.2
Eastern Europe	65.3	68.0	70.8	73.7	76.8	79.9	83.1	84.8	86.5	88.2
MEA	54.2	59.6	64.9	70.7	77.0	83.8	91.2	93.0	94.9	96.8
LATAM	54.7	59.0	63.2	67.7	72.5	77.7	83.3	85.0	86.7	88.4
APAC	60.3	64.8	69.3	74.1	79.3	84.8	90.7	92.5	95.4	96.3

Source: The Eastern Management Group, Inc.

SIP Trunking Traffic by Vertical Industry

2020-2027 SIP Trunking Traffic by Vertical Markets

Percent of All Network Traffic

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Aerospace & Defense	45.4	46.5	47.6	48.7	49.9	51.1	52.3	53.3	54.4	55.5
Automotive	55.2	58.5	61.8	65.3	69.0	72.9	77.0	78.5	80.1	81.7
Banking & Finance	58.7	64.0	69.3	75.0	81.3	88.0	95.3	97.2	97.2	97.2
Chemicals & Petroleum	51.6	55.6	59.6	63.9	68.5	73.4	78.7	80.3	81.9	83.5
Communications Service Provider	71.4	74.3	77.1	80.0	83.0	86.1	89.3	91.1	92.9	94.8
Construction & Engineering	63.2	68.0	72.8	77.9	83.4	89.3	95.6	97.5	97.5	97.5
Consumer Package Goods	61.0	66.7	72.4	78.6	83.3	88.6	94.2	96.1	96.1	96.1
Education	48.0	53.7	59.3	65.5	72.3	73.9	75.5	77.0	78.6	80.1
Electronics	63.8	67.8	71.8	76.0	80.5	85.3	90.4	92.2	94.1	95.9
Energy & Utilities	46.4	51.6	56.8	62.5	68.8	75.8	83.5	85.2	86.9	88.6
Government	46.5	52.1	57.8	64.1	71.1	78.9	87.6	89.4	91.1	93.0
Healthcare	55.3	60.2	65.0	70.2	75.8	81.8	88.3	90.1	91.9	93.7
Hospitality	55.6	58.6	61.5	64.5	67.7	71.1	74.7	76.2	77.7	79.3
Insurance	57.2	62.5	67.7	73.3	79.4	86.0	93.1	95.0	96.9	96.9
Life Sciences	70.9	74.6	78.4	82.4	85.6	88.0	90.5	92.3	94.2	96.0
Media & Entertainment	67.8	70.9	74.0	77.2	80.6	84.1	87.8	89.6	91.3	93.2
Professional Services	62.5	67.1	71.6	76.4	81.5	87.0	92.9	94.8	96.7	96.7
Retail	58.9	64.3	69.7	75.6	81.9	88.8	96.3	96.3	96.3	96.3
Travel & Transportation	64.7	70.5	76.2	80.4	84.0	87.2	90.5	92.3	94.2	96.0

Source: The Eastern Management Group, Inc.

SIP Trunking Traffic Industrial Sector

2020-2027 SIP Trunking Traffic by Industrial Sector Businesses - 10 Vertical Markets

Industrial Sector	Percent of All Network Traffic									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Aerospace & Defense	45.4	46.5	47.6	48.7	49.9	51.1	52.3	53.3	54.4	55.5
Automotive	55.2	58.5	61.8	65.3	69.0	72.9	77.0	78.5	80.1	81.7
Chemicals & Petroleum	51.6	55.6	59.6	63.9	68.5	73.4	78.7	80.3	81.9	83.5
Construction & Engineering	63.2	68.0	72.8	77.9	83.4	89.3	95.6	97.5	97.5	97.5
Consumer Package Goods	61.0	66.7	72.4	78.6	83.3	88.6	94.2	96.1	96.1	96.1
Electronics	63.8	67.8	71.8	76.0	80.5	85.3	90.4	92.2	94.1	05.9
Life Sciences	70.9	74.6	78.4	82.4	85.6	88.0	90.5	92.3	94.2	96.0
Media & Entertainment	67.8	70.9	74.0	77.2	80.6	84.1	87.8	89.6	91.3	93.2
Retail	58.9	64.3	69.7	75.6	81.9	88.8	96.3	96.3	96.3	96.3
Travel & Transportation	64.7	70.5	76.2	80.4	84.0	87.2	90.5	92.3	94.2	96.0

Source: The Eastern Management Group, Inc.

SIP Trunking Traffic Commercial Sector

2020-2027 SIP Trunking Traffic by Commercial Sector Businesses - 6 Vertical Markets

Commercial Sector	Percent of All Network Traffic									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Banking & Finance	58.7	64.0	69.3	75.0	81.3	88.0	95.3	97.2	97.2	97.2
Communications Service Provider	71.4	74.3	77.1	80.0	83.0	86.1	89.3	91.1	92.9	94.8
Energy & Utilities	46.4	51.6	56.8	62.5	68.8	75.8	83.5	85.2	86.9	88.6
Hospitality	55.6	58.6	61.5	64.5	67.7	71.1	74.7	76.2	77.7	79.3
Insurance	57.2	62.5	67.7	73.3	79.4	86.0	93.1	95.0	96.9	96.9
Professional Services	62.5	67.1	71.6	76.4	81.5	87.0	92.9	94.8	96.7	96.7

Source: The Eastern Management Group, Inc.

SIP Trunking Traffic GEM Sector

2020-2027 SIP Trunking Traffic by Government, Education and Medical Sector Businesses - 3 Vertical Markets

GEM Sector	Percent of All Network Traffic								
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Government	46.5	52.1	57.8	64.1	71.1	78.9	87.6	89.4	91.1	93.0
Education	48.0	53.7	59.3	65.5	72.3	73.9	75.5	77.0	78.6	80.1
Medical	55.3	60.2	65.0	70.2	75.8	81.8	88.3	90.1	91.9	93.7

Source: The Eastern Management Group, Inc.

Company Analysis

Company Analysis – 8x8

Target Market Based On Survey Data n=4,000

Employee Size	Percentage of Customers
Small (Under 300)	75%
Mid-Market (300-500)	25%
Enterprise (More than 500)	

Value Proposition

► 1 million business users

► Primary business is UCaaS

► **Top-10-Leader in EMG's 2019 SIP trunking CSAT survey**

Source: The Eastern Management Group, Inc.

Vendor
Customer Satisfaction Survey (CSAT)
Ratings

Customer Satisfaction Measurements

Three Categories and 12 Customer Satisfaction Measurements

12 Customer Satisfaction Measurements	
Product	**Technology and Product**
	Reliability
	Innovation
	Management Tools
Vendor Experience	**Purchase Experience**
	Installation
	Billing
	Support
	Contact Center Experience
Customer Delight	**Value**
	Overall Satisfaction
	Recommend to a Friend

Source: The Eastern Management Group, Inc.

Satisfaction Scale

Customers Tend to Be Satisfied with Their SIP trunk Provider

Satisfaction Rank		
	Highest Satisfaction	Heat
Technology and product	#1	
Reliability	#2	
Installation	#3	
Overall satisfaction	#4	
Purchase experience	#5	
Value	#6	
Innovation	#7	
Billing	#8	
Support	#9	
Contact center experience	#10	
Management tools	#11	

Source: The Eastern Management Group, Inc.

Overall Top-10-Leaders℠ Customer Satisfaction

Leaders in Customer Satisfaction 2019	Rank
Flowroute	#1
Twilio	#2
8x8	#3
Sangoma	#4
MegaPath	#5
Voyant	#6
Fusion	#7
Nextiva	#8
BT	#9
Orange	#10

Source: The Eastern Management Group, Inc.

8x8 Satisfaction Ratings 2019

8x8 Customer Satisfaction Measures

Customer Satisfaction Measurements	4 POINT SCALE
Technology and Product	3.60
Purchase Experience	3.60
Support	3.60
Management Tools	3.40
Total Overall Satisfaction	3.55

n=3,000

Source: The Eastern Management Group, Inc.

8x8 Customer Satisfaction Measures

Customer Satisfaction Measurements	4 STAR SCALE
Technology and Product	★★★★
Purchase Experience	★★★★
Support	★★★★
Management Tools	★★★1/2
Total Overall Satisfaction	★★★★

Source: The Eastern Management Group, Inc.

8x8 Customer Satisfaction Measures

Customer Satisfaction Measurements 4 Point Scale		
	8x8	**Industry Average**
Technology and Product	3.60	3.29
Purchase Experience	3.60	3.19
Support	3.60	3.09
Management Tools	3.40	3.07
Total Overall Satisfaction	3.55	3.16

Source: The Eastern Management Group, Inc.

8x8 Customer Satisfaction Measures

Would You Recommend 8x8 to a Friend		
	8x8	**Industry Average**
Very Likely	100.0%	45.7%
Somewhat Likely	0.0%	42.7%
Not Likely	0.0%	11.6%

Source: The Eastern Management Group, Inc.