DYNAMIC MARKETS

Fabric Connect Customer Experience Research

Independent Market Research
Commissioned by

AVAYA

January 2015

Executive Summary:

- Implementation time = 11x faster
- Configuration time = 6.5x faster
- Wait time = 3x shorter
- Troubleshooting times = 6.5x faster
- Failover time = 2553x quicker
- Outages due to human error = 100% improvement
- 92% have seen improvements to advanced services and applications due to FC implementation
- 67% would now consider new types of advanced services and applications
- FC has impacted how staff spend their time for 74%

Key Findings

Background and introduction:

This independent market research set out to investigate the impact Avaya's networking technology, Fabric Connect (FC), has had on its customer base. It shows that all key performance indicators have been improved to some degree, but also that many common problems typically associated with running a network have actually been almost eradicated for some customers.

1.1 Key Metrics:

Implementation time:

68% of Avaya FC customers say it takes less time to implement the FC network compared to other networks (of equal size). The average figure for implementing a new network has changed from 14 days to 1.3 days. This means that an Avaya FC network is 10.8 (or 11) times faster to implement [Table 1].

"From days to hours."

"Because we are only implementing in the edge, it's a quick process either way. Before Fabric Connect it was about a day; with Fabric Connect it's around half an hour."

"We found deploying Fabric Connect quite easy, and creating and deploying the network is very simple."

"It has really simplified the way we plan and configure the network; it has reduced risks and errors because the protocol is simplified. It is quick now we have to configure fewer devices than before; because there are fewer devices, there is less to do."

"By the way we are set up, it takes about the same time, but overall the administration of it has been vastly simplified."

Configuration time:

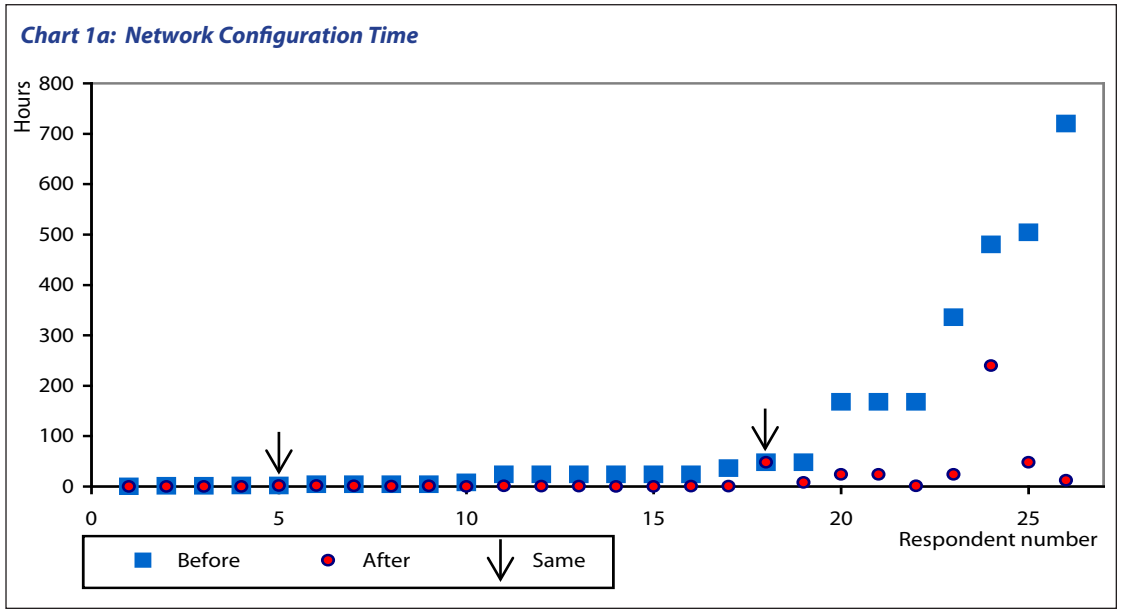
86% of respondents say it now takes less time to configure a network. The average time has come down from 110 hours to 17, making it 6.5 times faster, which represents an improvement of 85%.

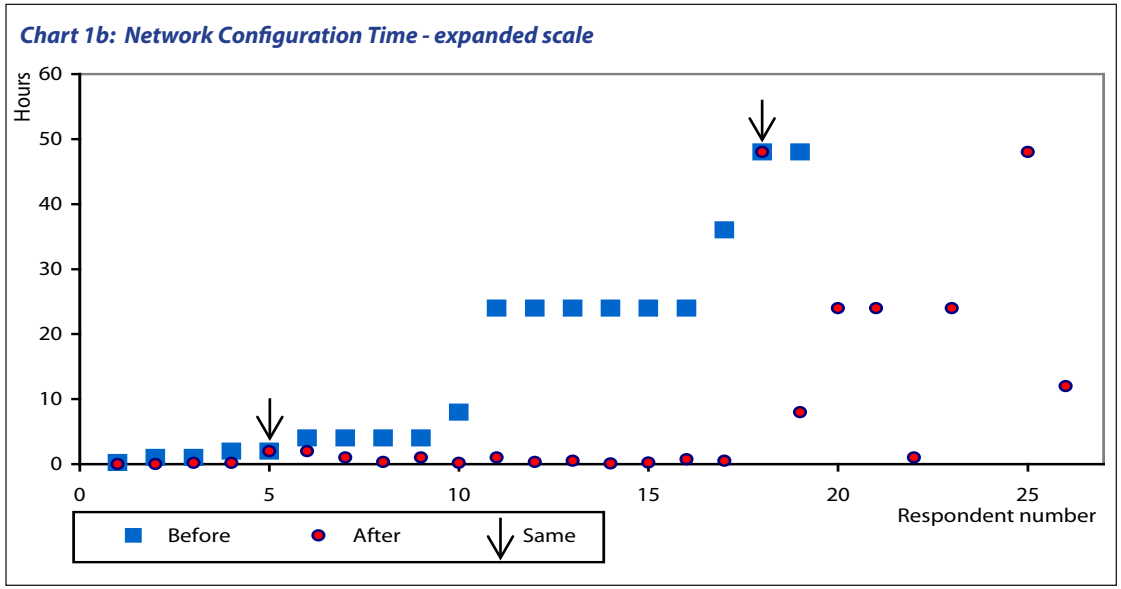
Charts 1a and 1b show individuals' 'before' and 'after' responses to this line of questioning. Chart 1b has an expanded scale and shows the detail for people who gave answers between 1 and 60 hours. These charts demonstrate that there is a wide variety of 'before' answers, but that almost all of those who quantified their response have seen improvements to their network configuration times. Indeed, many of these represent dramatic improvements.

Table 1: Summary of key metrics

Parameters:	Number of times better (average)	Average % less
Implementation time	10.8x	91%
Configuration time	6.5x	85%
Wait time	3x	66%
Troubleshooting	6.5x	85%
Failover time	2553x	100%
Outages due to human error	n/a	100%

© Dynamic Markets Limited 2015





Wait time:

The research also shows that 82% of Avaya FC customers have seen improvements to their wait times when significant changes need to be made to the network. Respondents were told that an example of a significant change would be adding a new service or application to the network and to include in their waiting time any delay from coordinating with other groups before making the changes. The findings show that companies with a FC network have 66% less wait time on average [Table 1]. However, the research also shows that some customers have found wait times have been eradicated altogether.

> *"Don't have to wait because Fabric Connect gives us the ability to deploy a network through all our architecture virtually instantaneously."*

> *"Because there are fewer devices, the waiting is much less than before."*

> *"Since deploying Fabric Connect, the time is down to 10 minutes."*

Troubleshooting:

41% of respondents quantified improvements to their network troubleshooting times. However, many have not had any issues with the network since implementation of the FC technology and so were unable to do so.

> *"It's not comparing the same thing. The simplified architecture of Fabric Connect has eliminated the problems that we had to troubleshoot, which is more the point." [Implemented June 2014]*

> *"We haven't had to. Once the base architecture for Fabric Connect is set up, the configurations ride on top of that architecture, so there is very little extra configuration to be done." [Implemented August 2014]*

> *"Never had a problem to troubleshoot with Fabric Connect, so I have nothing to compare it with." [Implemented November 2013]*

> *"Touching wood, we haven't really had any problems to troubleshoot since implementing Fabric Connect, so that number is a bit of an estimate." [Implemented October 2013]*

© Dynamic Markets Limited 2015

"The 'since implementing' figure I have given you is a guess, as we haven't had to troubleshoot as yet." [Implemented July 2014]

"It has made identifying issues much easier, but there are hardly any issues these days anyway." [Implemented July 2013]

"Only change is that now it is all down to me. There is no change in time to do it although this is probably because we are only using it in the core." [Implemented July 2014]

The above qualitative comments show that some of these customers have not had any network problems for some considerable time now, with implementations going back as far as October 2013. It also shows that customers who implemented only a few months prior to the research are already realising this benefit.

Despite this, the research shows that the average troubleshooting times changed from 39 hours down to just 6 hours, which represents an 85% improvement and times that are 6.5 times quicker [Table 1].

Failover time:

70% of Avaya customers have seen improvements to failover time since implementing their FC network. However, once again, some customers report an absence of network problems since implementation, making it hard for them to answer this question.

"We've not had a failure yet." [Implemented July 2013]

"It has increased reliance tenfold. We perform upgrades on the core network without any impact on services." [Implemented July 2013]

Nevertheless, the average failover time of 817 seconds has been lowered to 0.32 seconds, which is 2553 times faster [Table 2].

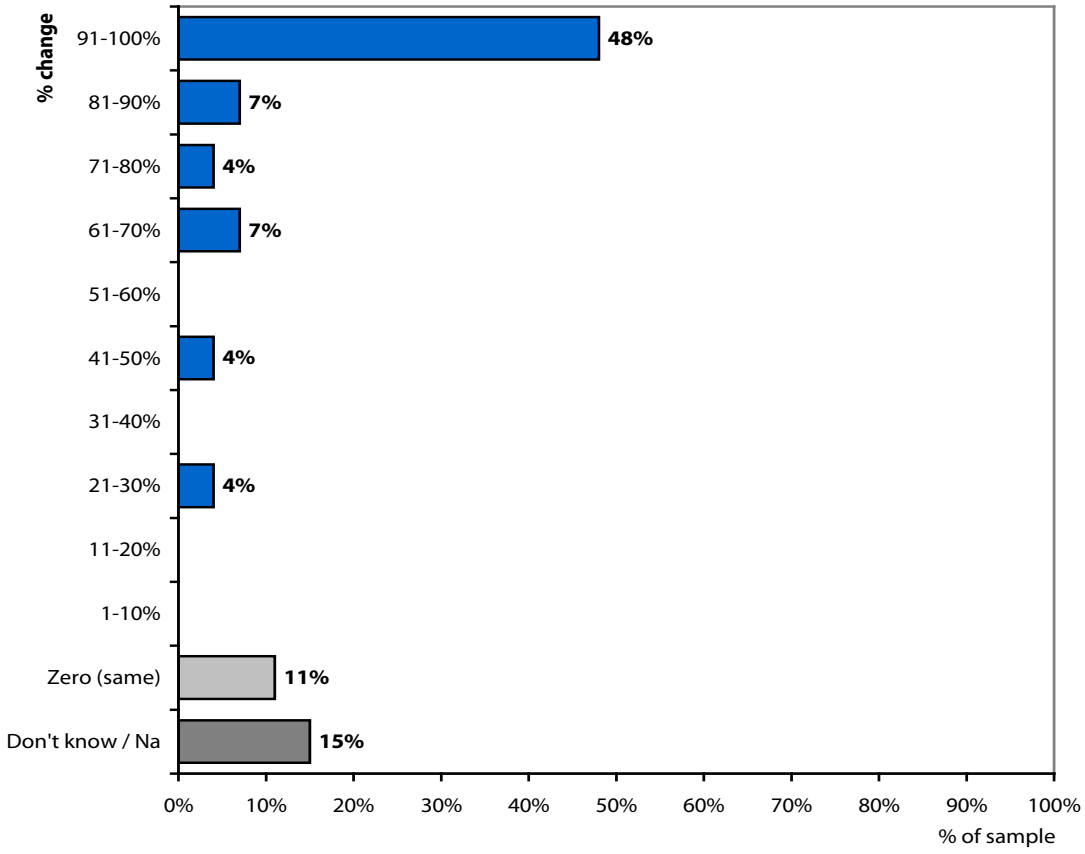
Outages due to human error:

Before implementing FC, 85% of respondents had problems with network outages caused by human error in the core of the network. However, since implementation of the FC network, 74% have seen improvements and such

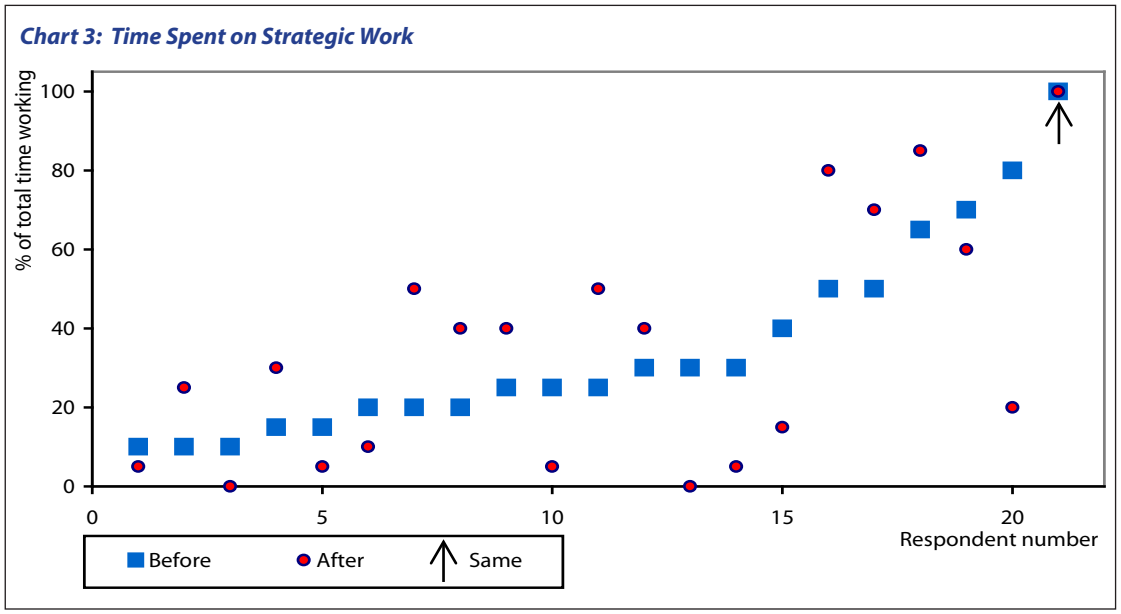
Table 2: Network failover time (seconds)

Time	Prior (seconds)	After (seconds)	Delta (seconds)	X better	% less
Average	817	0.32	817	2553x	100%
Min	0.1	0.001			
Max	10,800	2			

Chart 2: Percentage Change in Outages Since FC Implementation



© Dynamic Markets Limited 2015



outages dropped from an average of 3 pa to zero (i.e. 100% improvement) . Indeed, the majority have seen dramatic improvements to this area of their business [Chart 2]. This line of questioning reinforces again that many customers simply have not had these sorts of traditional network problems since their FC implementation.

> *"We have a very good system that is well built and well maintained. We have had small outages in the past implementing different architectures, but with SPB we haven't." [Implemented August 2014]*

> *"This has been brilliant for us. We have not had any outages due to human error." [Implemented July 2013]*

> *"The number of errors is less, but more important is that the impact of those errors is less. Previously it would be thousands of users impacted; now it's more like hundreds." [Implemented December 2013]*

> *"Besides anything, Fabric Connect really simplifies the configuration so it does minimise and reduce that possibility." [Implemented October 2013]*

It also reinforces that customers have not had such problems for a long period of time, with implementations going back well over a year.

Strategic focus:

Before implementation, companies report that staff spent between 10% and 100% of their time on strategic network planning and deployment of strategic projects, rather than on day-to-day operational tasks, and the average figure was 35%. However, how companies manage their staff with respect to strategic work varied considerably [Chart 3].

Indeed, since FC implementation, as many customers report spending more time on strategic issues (37%) as spend less time on such work (37%), with a minority group saying this aspect has not changed at all (7%).

Among the 37% who spend less time on strategic issues, many reveal that this is because the technology works and does not need strategic planning to improve it or solve problems.

> *"We haven't needed to [be strategic], because it works." [From 25% to 5%, implemented July 2014]*

> *"It continues to come down as we increase and broaden the deployment." [From 20% to 10%, implemented August 2014]*

Comments from the 37% who spend more time on strategic issues reveal that some companies who have only implemented very recently have already seen an impact in this area.

> *"Instead of working on switches etc., we are able to work on new projects and migrate old technologies." [From 65% to 85%, implemented August 2014]*

> *"I would say we have more time available to us to do strategic planning." [From 30% to 40%, implemented July 2012]*

Whether staff's strategic work has gone up or down seems to be down to how they organise themselves and manage people. However, one thing seems definite; that the FC technology has impacted how staff spend their time in 74% of these companies.

1.2. Enabling Technology:

93% of Avaya FC customers had already deployed at least 1 type of advanced service or application, with the average number being 4. The most commonly deployed were real-time applications (85%), IP-based video surveillance (67%) and multicast applications (63%) [Table 3]. Fewer had deployed IP multicast-based video surveillance (26%), data protection / privacy segmentation (e.g. **PCI) and data protection / privacy segmentation (e.g. **HIPAA) (both 30%).

The research shows that 92% of FC customers have seen improvements to at least 1 category they already had deployed on their network. Indeed, 56% say *all* categories have been improved, while 70% say three-quarters or more have and 82% say at least half have been made better by implementing FC.

The most improved categories are IP multicast-based video surveillance and multi-tenant segmentation, where *all* customers who had these prior to FC implementation have since seen improvements (both 100%).

© Dynamic Markets Limited 2015

In addition to this improvement, since deploying FC, 37% of customers have deployed new types of advanced applications and services, and the most commonly deployed are multi-tenant segmentation, data protection / privacy segmentation (e.g. **PCI) and multicast applications (all 19%).

Furthermore, since deploying FC, 67% of customers would now consider deploying new types of applications and services, and the most popular are IP multicast-based video surveillance (41%) and video distribution applications (33%).

When these various lines of questioning are combined, it reveals that 93% of Avaya FC customers have seen either an improvement to existing applications and services, or been able to deploy new ones, or would now consider doing so since their implementation of FC.

Table 3: Applications deployed prior to FC implementation and since improved

Service or application category	Deployed prior (base = all)	Improved (base = those that deployed it prior)
IP-based video surveillance	67%	83%
IP multicast-based video surveillance	26%	100%
Multi-tenant segmentation	37%	100%
Data protection / privacy segmentation (e.g. **PCI)	30%	63%
Data protection / privacy segmentation (e.g. **HIPAA)	30%	75%
Multicast applications	63%	88%
Real-time applications	85%	78%
Video distribution applications	48%	85%
Other advanced applications	11%	100%

© Dynamic Markets Limited 2015

Research Methodology:

This independent market research was commissioned by Avaya and conducted by Dynamic Markets Limited. This detailed quantitative and qualitative research was carried out by telephone with 22% of Avaya's FC customers. This represents a total of 28 interviews.

The majority of companies in the sample implemented their FC network recently in 2014 (64%). Many of these (two-thirds) did so in the latter part of the 2014 calendar year. However, a third of the sample implemented this technology before 2014, with the earliest being in 2011 [Chart 4].

93% of respondents confirmed they are involved in the day-to-day operations of the network (part or whole) and 90% are in network management roles.

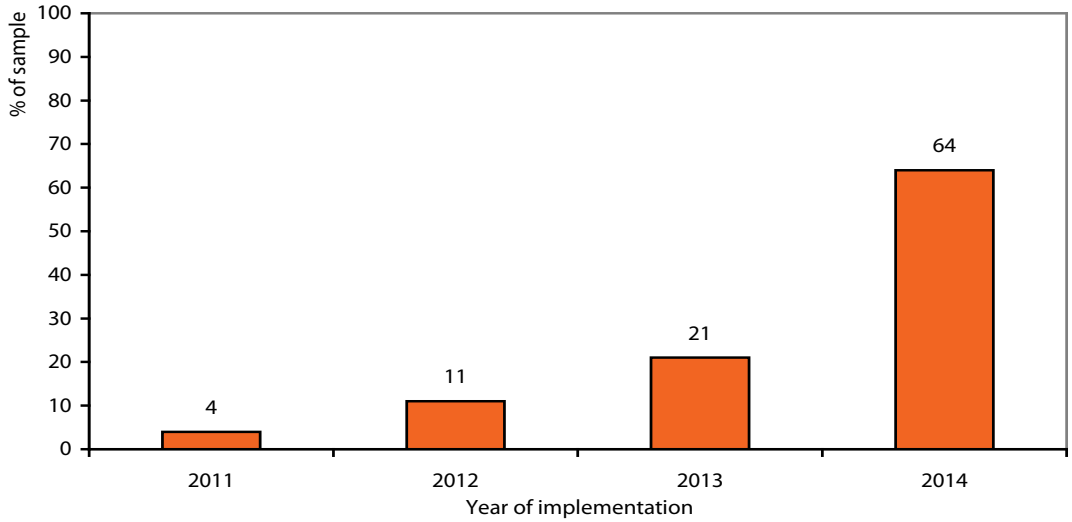
Interviews were conducted during late November and early December 2014. Respondents were promised anonymity to encourage unbiased and open responses to the questions.

Six countries are covered by this sample, including the US, the UK, Canada, Germany, the Netherlands and Spain, with the majority of respondents residing in the US. The sample covers a variety of industry sectors, with many respondents coming from education, healthcare and local government.

Respondents were asked to estimate how confident they felt in the answers they gave for the 'before' and 'after' implementation questions. Overall, confidence levels for these quantitative questions are very high, with a mean of 8 out of 10 (with 10 being completely confident).

Dynamic Markets is a UK-based, independent market research consultancy serving blue-chip clients around the world. Established in 1999, it delivers high-calibre, qualitative and quantitative research with a strong focus in the B2B and high-tech sectors. It strictly adheres to the MRS Code of Conduct.

Chart 4: Age of Avaya FC network



© Dynamic Markets Limited 2015

Contacts:

Report Author:

Dr Cherry Taylor

Managing Director

Dynamic Markets Limited

Tel: +44 (0) 870 707 6767

Email: cherry.taylor@dynamicmarkets.co.uk

Web: www.dynamicmarkets.co.uk

Media Contact:

Deborah Kline

Avaya

Tel: +908-953-6179

Email: klined@avaya.com

Web: www.avaya.com

Corporate Contact:

Jaime Weaver

Avaya

Tel: +720-475-9740

Email: weaverj@avaya.com

Web: www.avaya.com

© Dynamic Markets Limited 2015