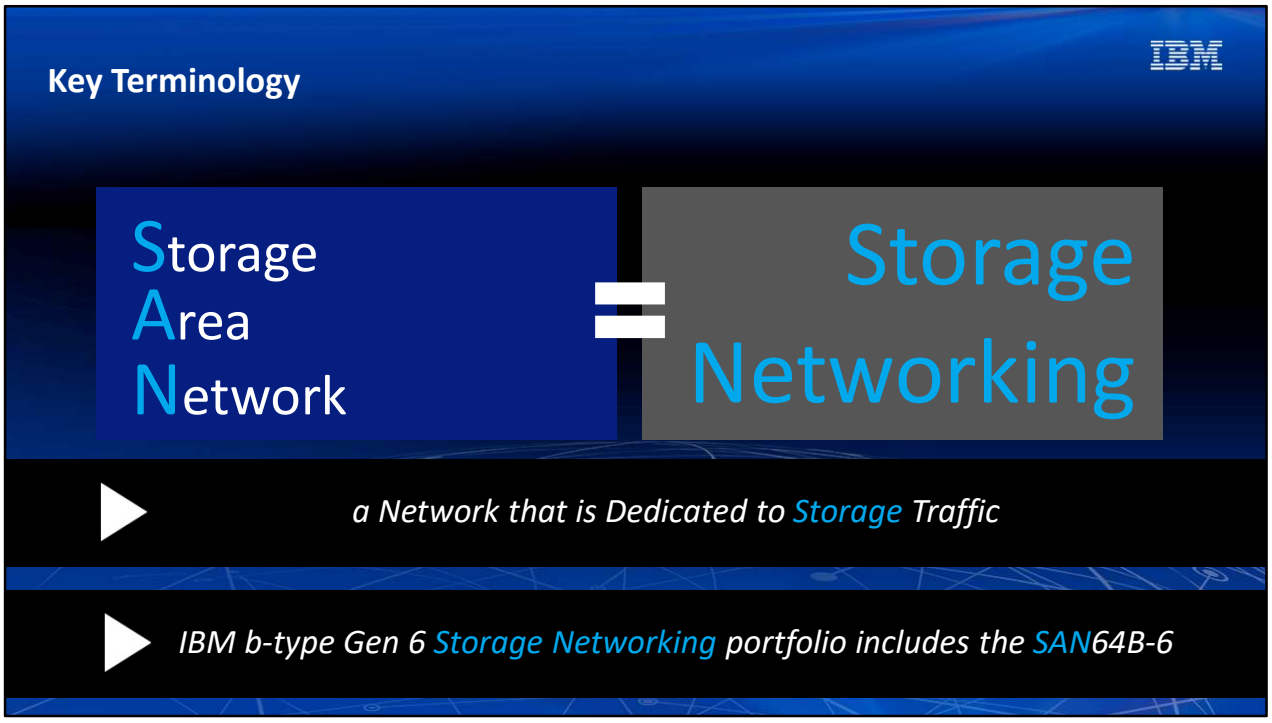
IBM Storage

Selling Storage Networking with IBM Storage

- Hello and welcome to the IBM “Selling Storage Networking with IBM Storage” webinar.
- This is a quick training discussing a compelling event that is driving Storage Area Network upgrades, and could give you an opportunity to make more money when you are selling Storage and/or Servers.
- There’s a short mastery quiz at the end of this training.
- So, let’s get started.



- First, lets review fundamental terms to avoid any confusion. Depending on your experience in the storage or networking industry this may be a review.
- The terms SAN – “S” “A” “N” – stands for Storage Area Network and was based on the common popular acronym, LAN, for Local Area Network.
- While a LAN is typically an ethernet network that carries a variety of very common office type data traffic such as file share, email, management traffic, printers, etc … the SAN is a network that is *dedicated* to storage traffic only. Storage traffic, especially block level storage traffic, is different than typical LAN traffic due to its size and need for high bandwidth, low latency, high availability and other factors.
- In this presentation … we will use the terms SAN and “Storage Networking” interchangeably.
- The two important terms are built into the IBM names for the products. For example, within the IBM b-type Gen 6 Storage Networking portfolio, there is a product called the “IBM SAN64B-6” switch.

- So, what will we be sharing with you today?
- First: How a combination of new storage and server technologies, including flash and Non-Volatile Memory Express or "NVMe" storage, is driving customers to upgrade their legacy 8 Gb (also known as Gen4) and older SAN's. And…..the End of Support on legacy 8 Gig and older SAN switches has created a *compelling event* for customers to upgrade their installed, legacy Fibre Channel storage areas networks.
- We'll also learn that when selling the SAN with the storage and/or servers, you can increase your revenue per sale by 20% or more all it takes is to ask the customer about their Fibre Channel SAN
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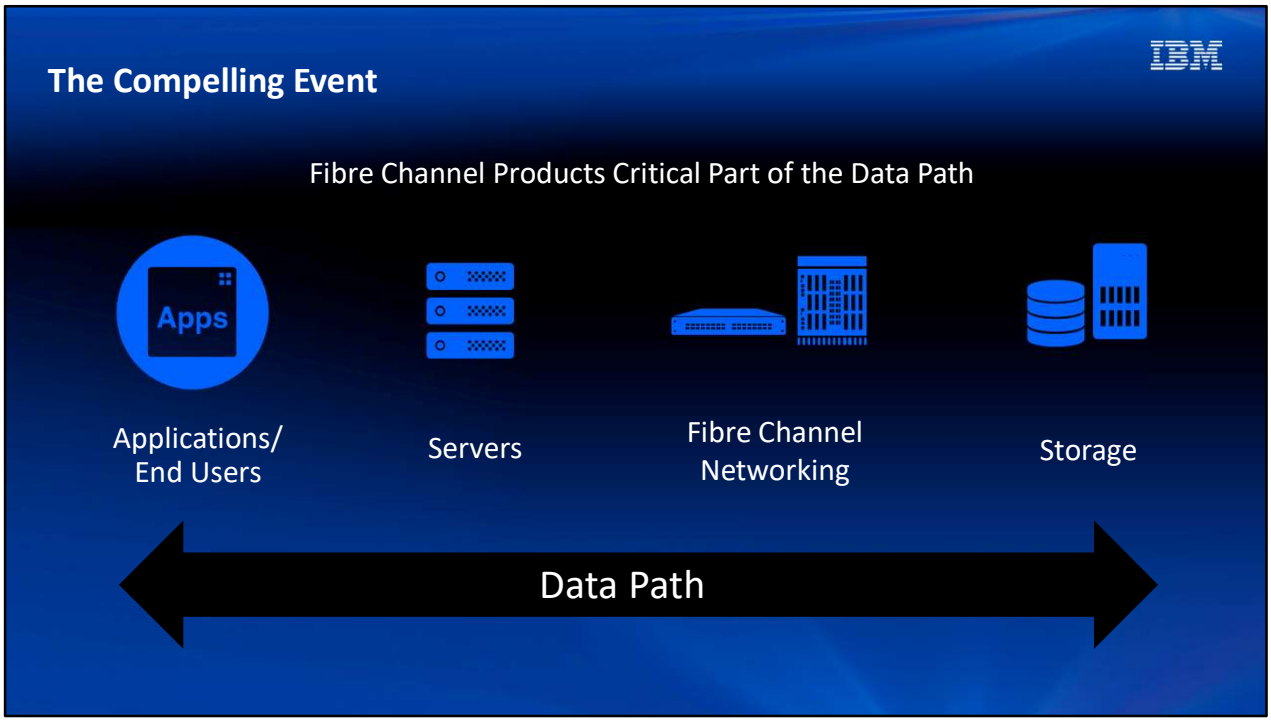
- And owning the storage area network, which is a very strategic footprint in the data center, provides you greater account relevance and control. It will also provide you better visibility to your customer's environment from server-to-SAN-to-storage and beyond. This puts YOU in a unique position to sell across your portfolio.



- When we're selling either storage or servers, we often will tend to focus on only that specific part of the infrastructure. But, remember the customer is buying the storage, network and servers to ultimately support their applications and their end users needs for fast, reliable, and secure access to data.
- Within IT – what customers really care about is their data. Technology changes, but data remains their most important asset.
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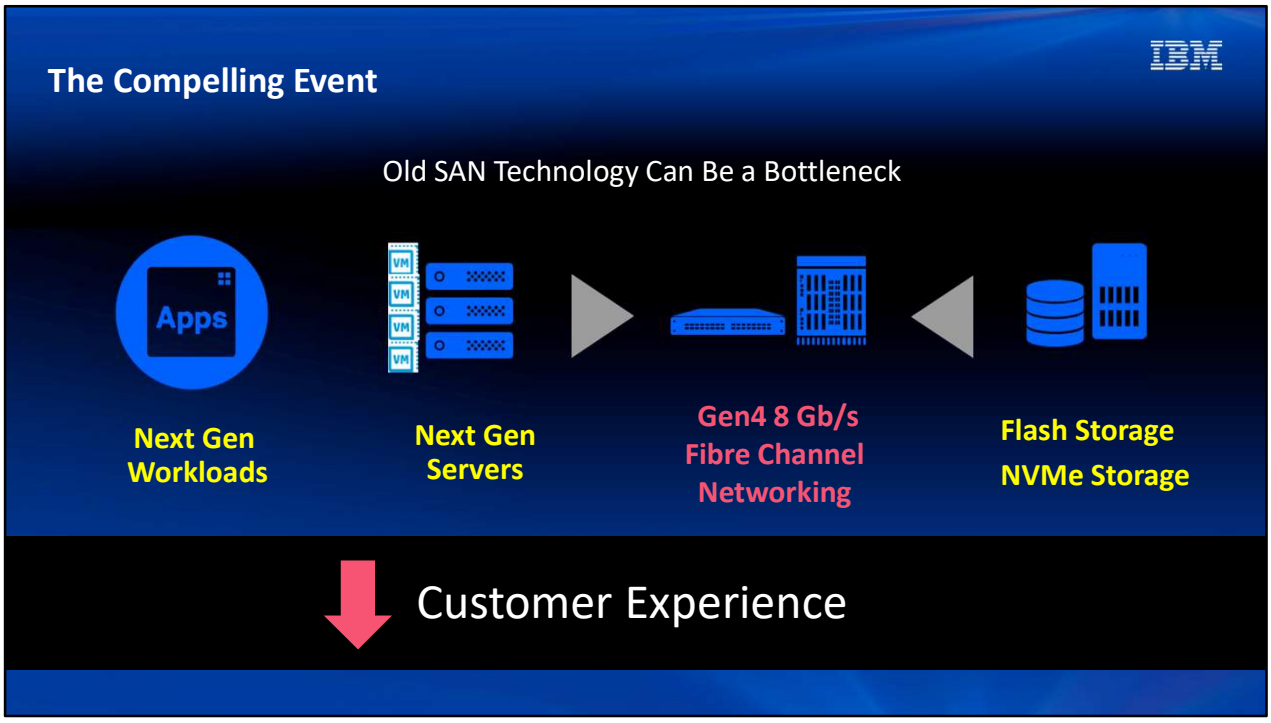
- All of these-- the storage, network and servers-- are part of the data path. And as they say a chain is only as strong as it's weakest link.
- As new technologies are implemented, we're constantly chasing the bottleneck in the data path.
- To ensure the best customer experience, having the right components in place is critical – including the storage network!



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- The combination of traditional data-intensive workloads and next generation workloads-- like AI and Machine Learning-- are driving the need to upgrade the entire infrastructure.
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- These next generation workloads require next generation servers to support significant increases in virtual machine density as well as raw compute power. This also drives more IOPs across the network and through the data path. Even if you don't sell servers, it's important to understand that next generation servers are also impacting the network.
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- On the storage side Flash and NVMe storage are replacing traditional disc storage. Both Flash and NVMe storage provide **significant** performance benefits, and customers expect to see those benefits flow through to their application performance.
- Like servers, Flash and NVMe storage drive significant IOPs into the network and through the data path
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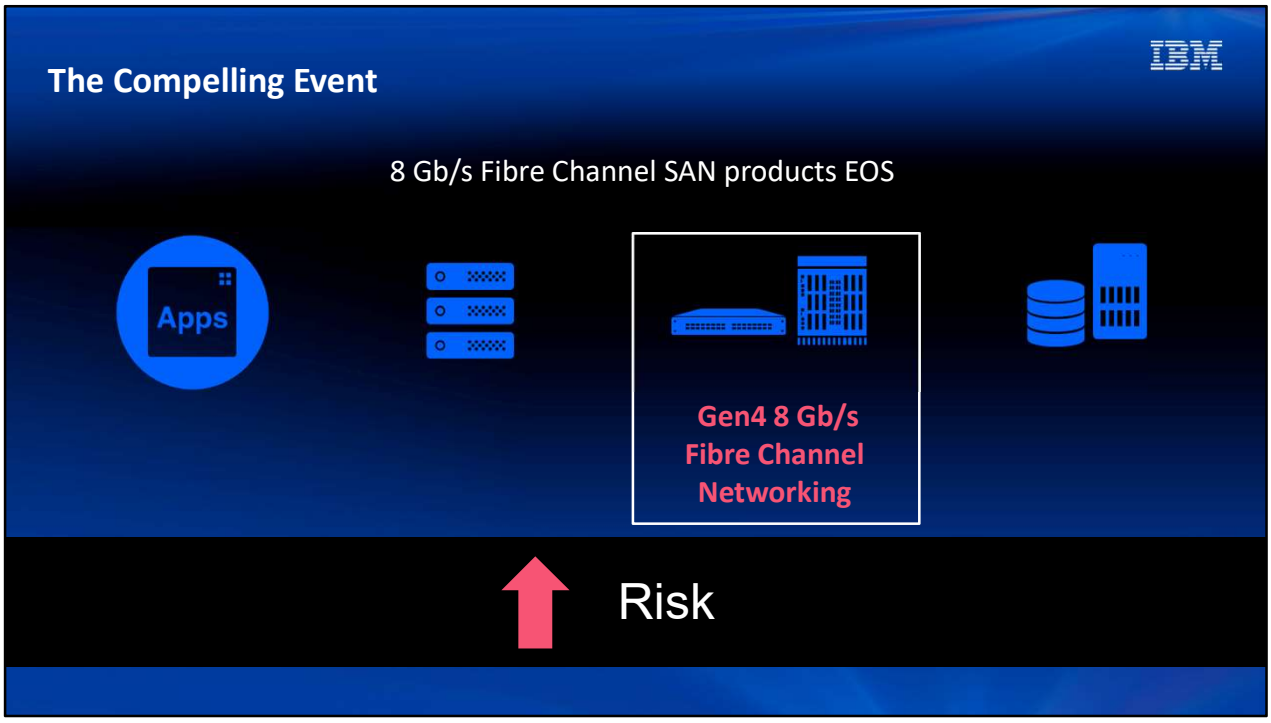
- Since legacy Gen4 8 Gb and older networks are not designed to handle the performance of Flash and NVMe storage, as well as the next generation servers, they can become a bottleneck – impacting the performance of the storage, the servers, and ultimately the applications.
- This can result in a negative customer experience…because there's a disconnect between the improvement a customer is expecting to see when implementing a Flash and NVMe storage solution and the actual performance improvements of their applications.
- Let me give you a real world example and we've seen this happen at a number of accounts.
- During a storage POC for new flash storage array, the customer wasn't seeing the performance benefits which were being promised. ONE of the sales teams selling the storage asked about the storage network, the other did not. The team which asked about the network discovered the customer was running the Proof of Concept over a legacy Fibre Channel network.
- So, that sales team provided the latest Gen6 32Gb SAN switch to use in the POC, and the customer immediately saw the performance benefits they'd been promised. That sales team not only won the storage POC, but they also added new SAN switching revenue to their deal.
- Bottom line: you don't want old generation infrastructure supporting next generation workloads, servers, or storage.
- The network can your silver bullet in competitive sales opportunities: use it to your advantage!



- In addition to the technology trends of Flash and NVMe storage driving the need for an upgrade to the network, the recent announcement of End of Support of all Gen4 8 Gb Fibre Channel SAN products creates a near term impending event.
- Customers use Fibre Channel for their most critical data – and remember, data is their most critical asset.
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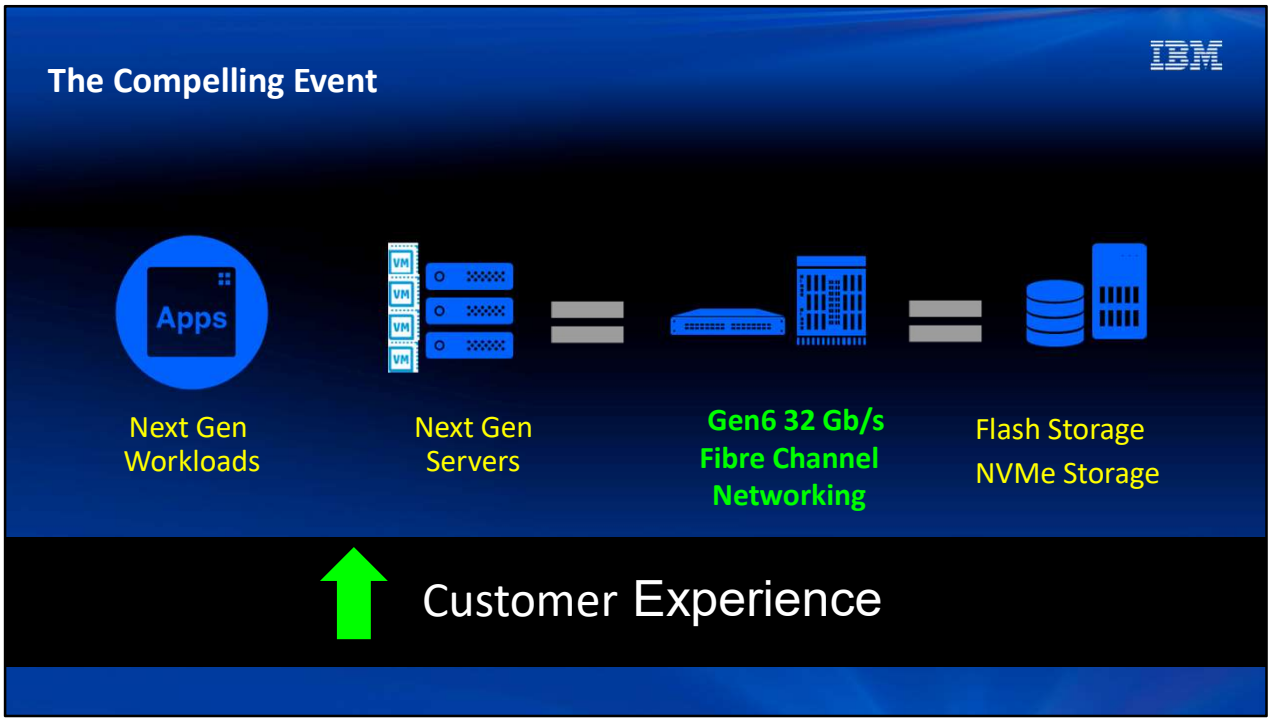
- Using unsupported products in the data path to access their most critical asset introduces risk to the customer.



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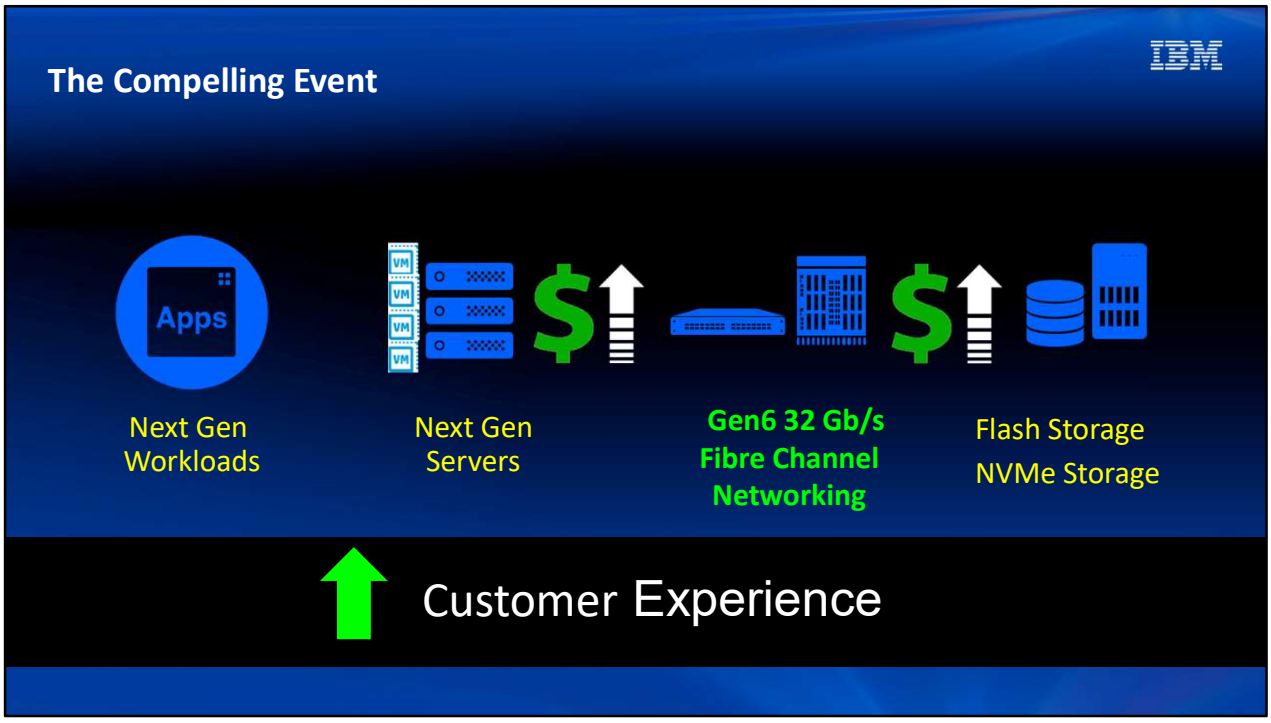
- Implementing the latest generation of Fibre Channel network ensures the entire data path is optimized to provide the right support for a customer's applications and end users.
- Gen6 Fibre Channel was purpose-built to support flash storage, and is the right choice for supporting NVMe storage with NVMe over Fibre Channel. Having the right infrastructure across the entire data path is critical for performance of the customer's applications.
- All of this works together to provide an improved customer experience – which makes future sales of storage and servers much easier.
- And on top of this selling the network with storage or with servers not only improves the customer experience, but can increase your revenue per sale by 20% of more!
- It's a win-win for you and your customers.



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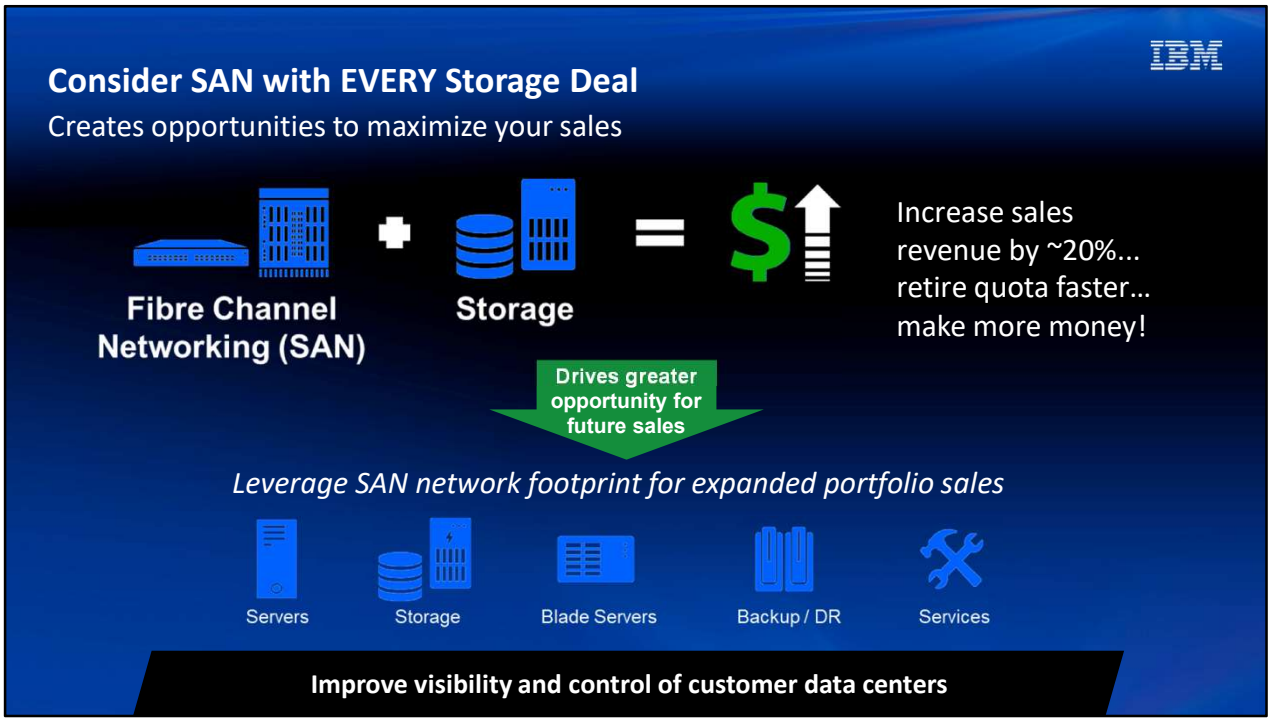

- So, consider SAN with EVERY storage deal.
- You not only increase revenue per sale by 20% or more….
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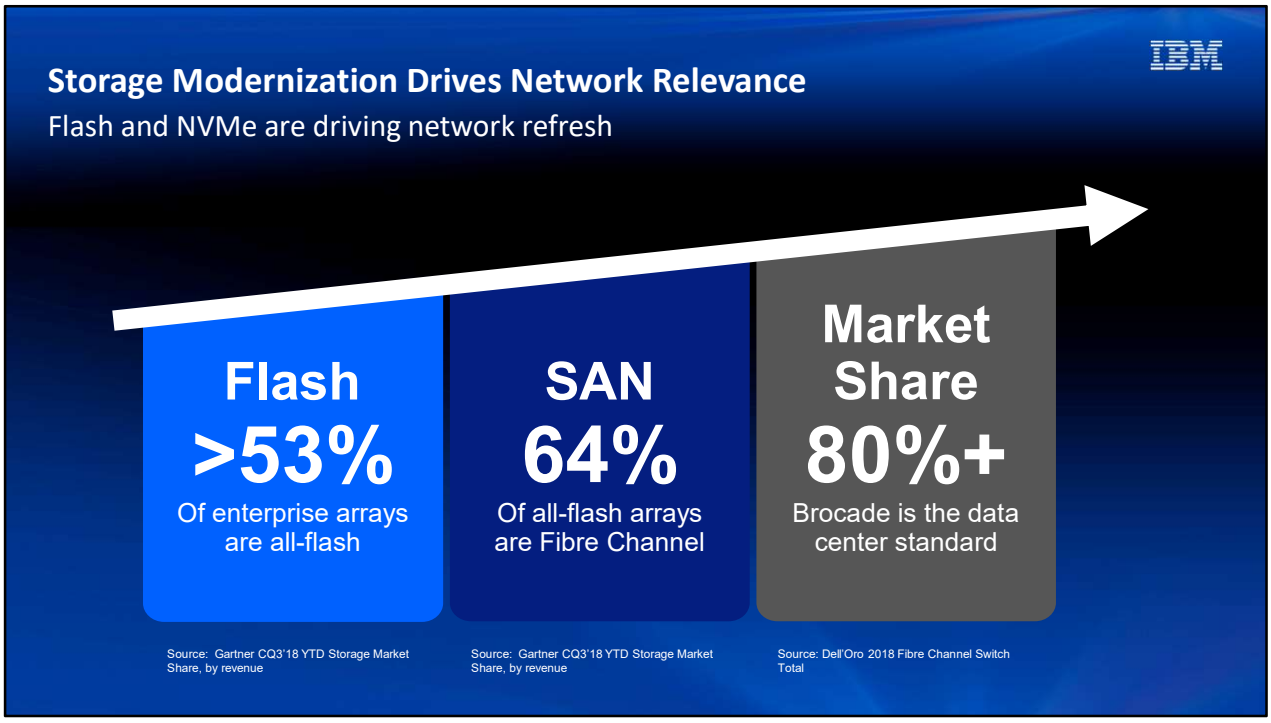
- But you can also leverage the SAN footprint for expanded portfolio sales.
- Owning the network give you visibility across storage, server, back-up and disaster recovery, and service sales opportunities.
- And, since the network touches everything, you are no longer talking about one part of the infrastructure, but rather having a broader conversation with your customers about their entire infrastructure. Selling the network gives you greater account relevance and control.



- So, we've talked about the compelling event driving customers to upgrade their networks…..as well as the revenue opportunity for you as you engage those customers. Let's switch quickly a broader view on the overall opportunity.
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- As we all know, Flash continues to increase as a percentage of storage sales. Per Gartner, all-flash arrays now exceed 53% of all storage sales.
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- 64% of those All Flash Arrays are connected via Fibre Channel SANs. Why? A couple reasons: one is the high performance and reliability characteristics of Fibre Channel SANs. Also, just like Flash storage, and increasingly NVMe storage, Fibre Channel is used where data matters most.
- So, there's a high attach rate of Fibre Channel to all-flash storage.
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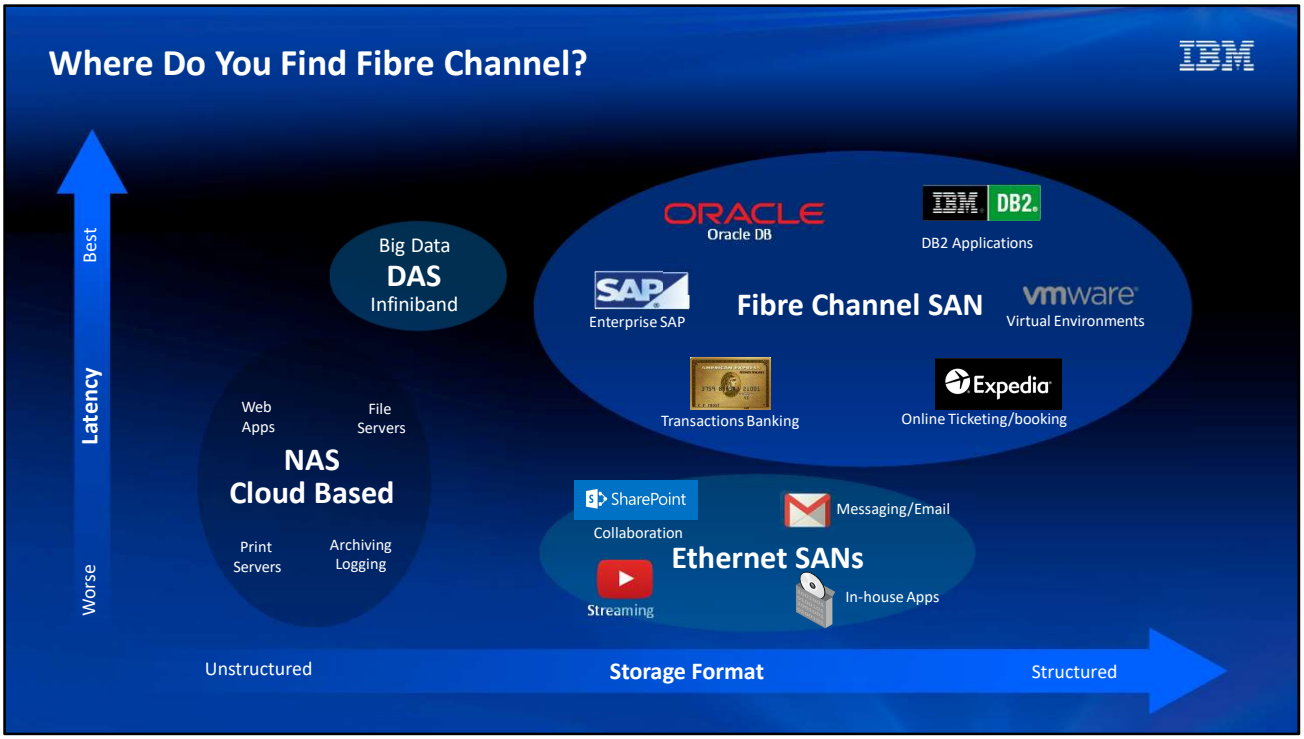
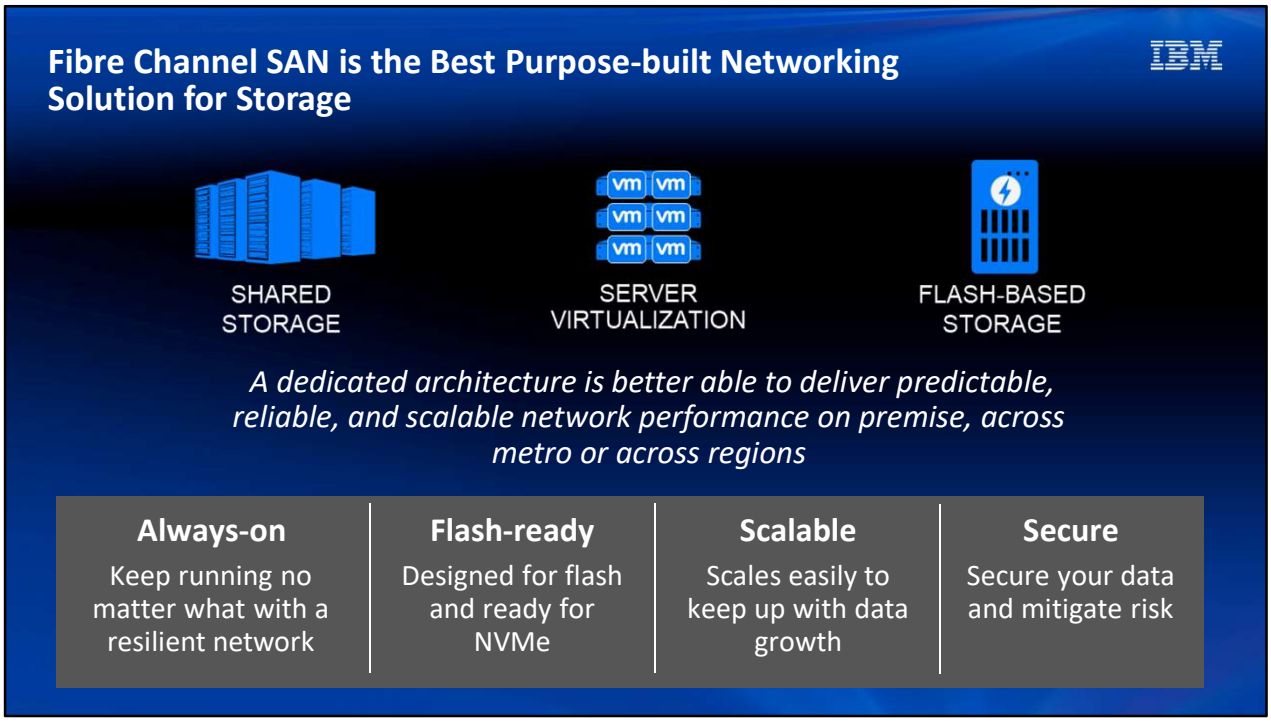
- And, Brocade owns over 80% of the Fibre Channel storage networking market. So, as you engage in these opportunities, you'll be selling to customers who are confident in and comfortable with Brocade's products and management tools.



- Where will you find Fibre Channel Storage Networks?
- It's simple: anywhere customers need to support mission critical applications such as databases, Oracle/SAP/DB2, on-line transaction processing or "OLTP" applications, large virtualized environments, and other mission critical applications where data and "always on" matters.
- Remember, Fibre channel is used where the data matters the most!



- And why is Fibre Channel used where data is critical?
- Fibre Channel was purpose built for storage. That's also why it's the right network infrastructure to support NVMe storage.
- Fibre Channel SAN's are the most trusted and widely deployed purpose-built networks for storage for a couple reasons:
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- They're "always on" networks, and so are used where access to data is critical to a company
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- They're designed specifically to support flash, and are ready today for NVMe
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- They're highly scalable, which is critical as data continues to grow exponentially
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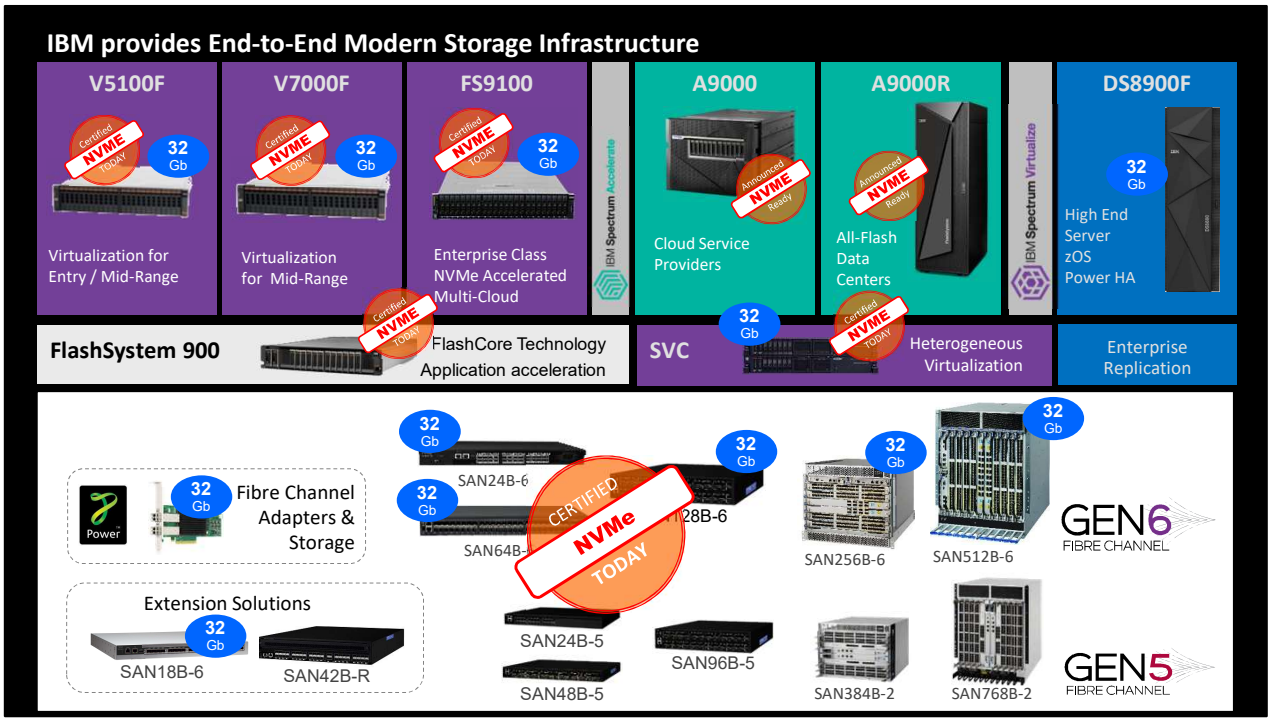
- And they provide a secure network which isolates and encrypts storage traffic from general purpose networks
- Fibre Channel has been an integral part of EVERY WAVE of storage advancement in the data center with Shared storage, server virtualization, Flash and now NVMe.
- Fibre Channel networks are the connective tissue which connects businesses to their most critical applications and data.



- Here are the current IBM storage array products available. They should be familiar to you, Depending on when you view this training, they may have changed since this snapshot in time. The important aspect to know is that IBM offers clients market leading storage products from entry level to enterprise. Many of them built on core IBM technologies such as FlashCore Modules, SAN Virtualization Clusters (SVC), and Enterprise Replication for providing the absolute best performance, availability and heterogeneous storage support.

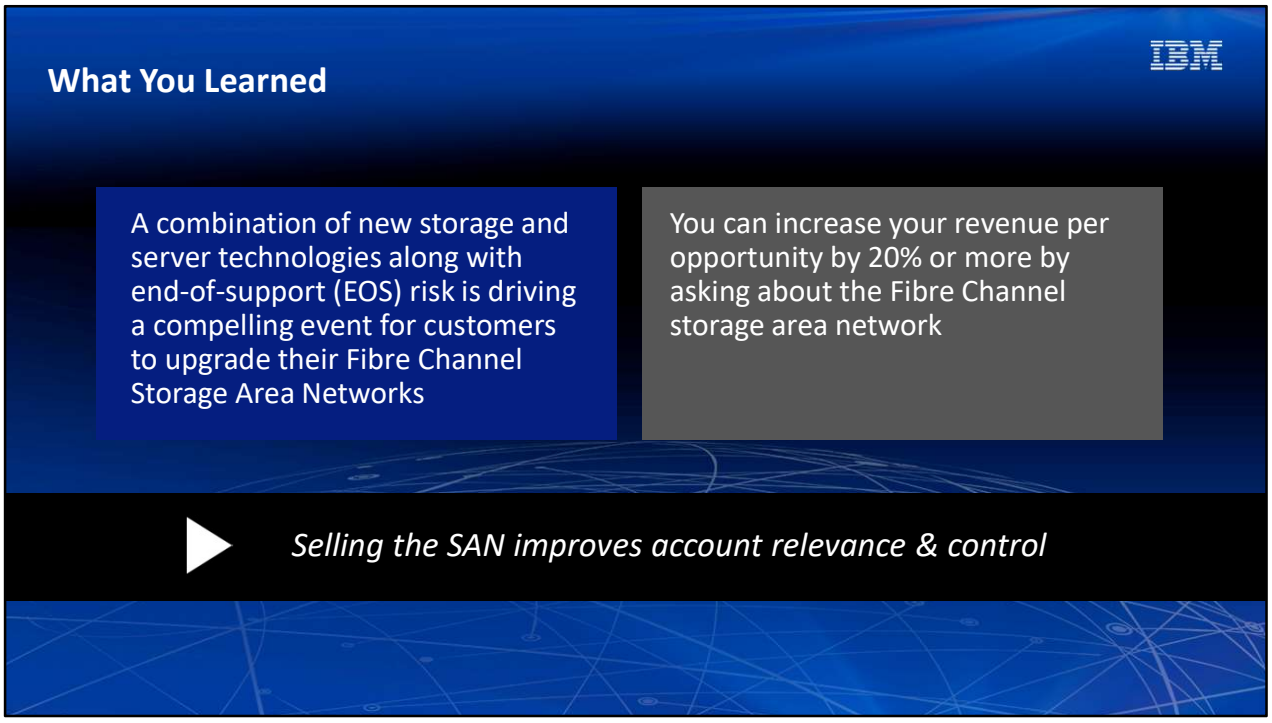
- For these products to connect to the applications, storage networking is required. Broadcom partners with IBM, to provide the Fibre Channel server adapters, the Fibre Channel storage networking and extension products, and key technology within the storage arrays, all enabling an end to end solution that meets the needs to today's modern data centers.

- All of the IBM b-type Gen 5 and Gen 6 products support the low latency NVMe protocol in addition to traditional SCSI and is a perfect match for all the IBM storage that also supports NVMe.

- Additionally, the Gen 6 adapter and SAN products support up to 32 Gbps port speed that perfectly matches the IBM storage arrays supporting 32 Gbps FC.

- Storage solutions should be viewed as an ecosystem. When you propose storage, you need to check the storage networking to ensure that the maximum performance of the overall solution is not inhibited by a legacy network.

- So remember to sell the storage network just like you sell the storage.



- As a wrap up, here is a summary what we learned today:
- A combination of new storage and server technologies, including flash and NVMe storage are driving customers to upgrade their legacy Gen4 8 Gb and older SAN's. And, the looming End of Support on legacy 8 Gb and older SAN networks has created a *compelling event* for customers to upgrade their installed, legacy Fibre Channel storage areas networks.
- We also learned that when selling the SAN along with storage and/or servers, you can increase your revenue per sale by 20% or more--often all it takes is to ask the customer about the Storage Network you will be connecting their new server, storage, or application to.
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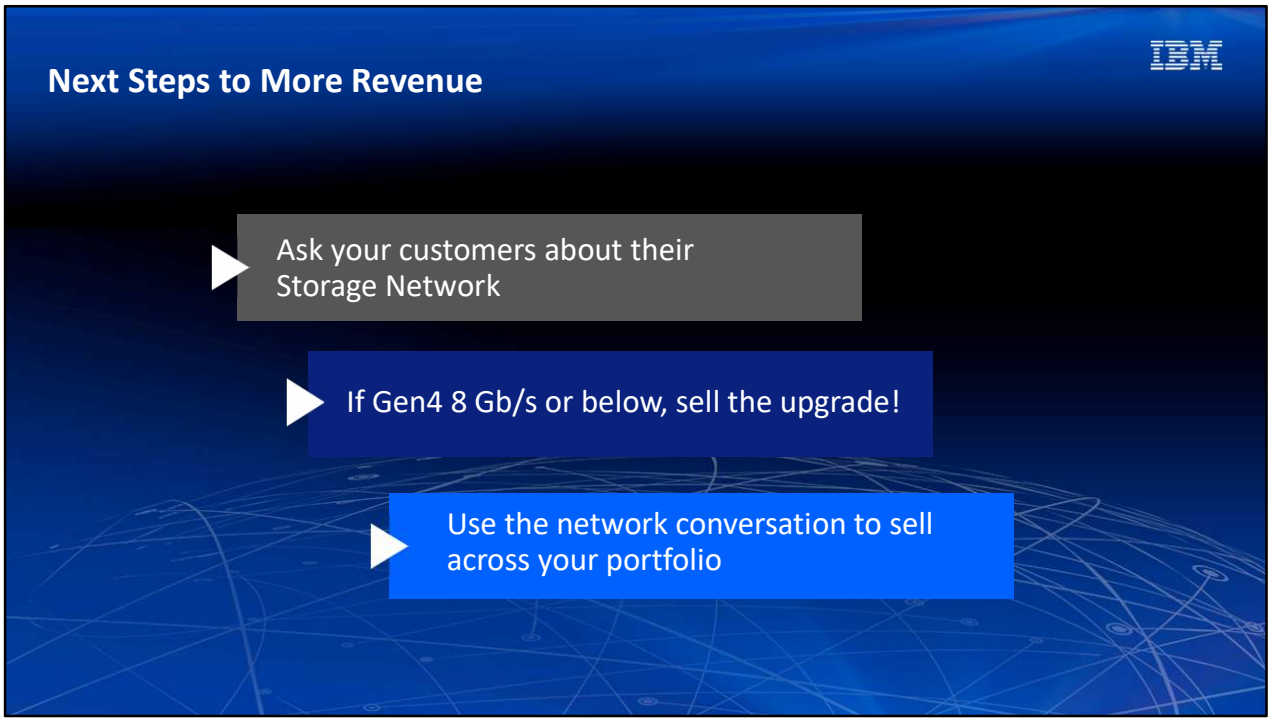
- And, you can enjoy greater account relevance and control by owning the Storage Network. It provides you better visibility to your customer's environment from server-to-SAN-to-storage. This puts YOU in a unique position to sell across your entire portfolio.



- So, what are the next steps to put your new SAN knowledge into practice?:
- First: Ask your customers about their storage network not only during a storage sale, but do it now.
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- Second: There's a compelling event in play for customers, and you want to benefit from that opportunity. If the Fibre Channel SAN is 8 Gb or older, include the upgrade to ensure they have the latest generation of network to support Flash and NVMe storage and next generation servers.
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- And third: Use that conversation to sell across your portfolio. A network upgrade can also give you visibility to new storage opportunities.

Thank you for your time today, and good Storage Network selling!