



# Virtual Apps, Desktops, and Labs, for a [new normal] Digital Campus

Providing software to students and instructors anytime, anywhere, on any device.

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# About Our Digital Campus



**The Digital Campus  
technology for an enhanced tomorrow**



**Students, faculty, and staff, succeed by seamlessly integrating technology into their teaching, learning, and research.**

**Objective 1** - Provide a digitally rich ecosystem that encourages access to technology.

**Objective 2** - Position faculty and students for success by addressing access and affordability of teaching and learning resources.



# What if...

- ▶ Faculty, staff, and students could have access to [licensed] software without having to physically be on campus or in a computer lab?
- ▶ Software didn't need to be installed on devices to run?
- ▶ We didn't need to spend money on growing our physical labs?
- ▶ They could access software seamlessly, anytime, anywhere, and from almost any device?
- ▶ CTS could easily provide software to everyone almost instantly upon request?
- ▶ We could track software usage and monitor use trends to ensure software and hardware infrastructure investments are being used to their fullest potential?

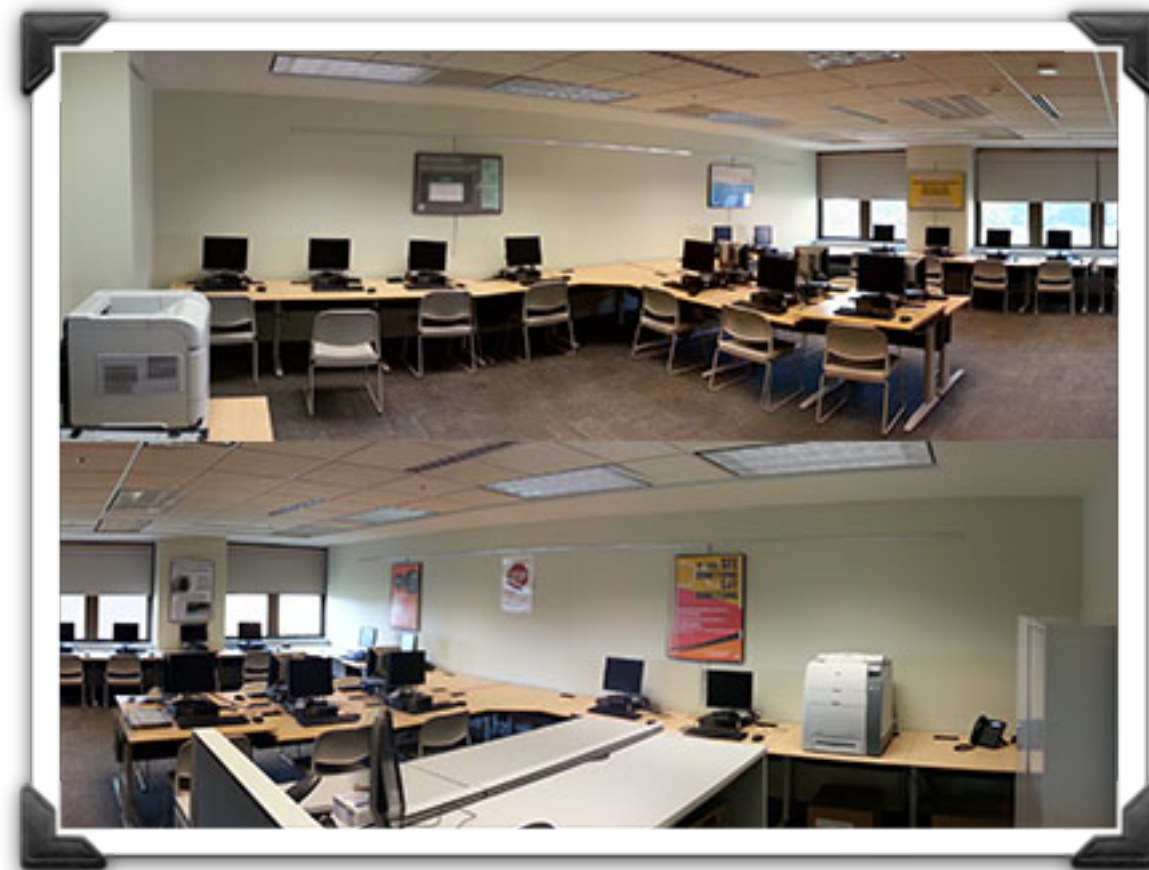
*"Application virtualization is software technology that encapsulates computer programs from the underlying operating system on which it is executed. A fully virtualized application is not installed in the traditional sense, although it is still executed as if it were."*



Think of virtual apps and desktops like Netflix.

# What if...

Lab spaces go from this:



To this...



 From our actually students learning from home.

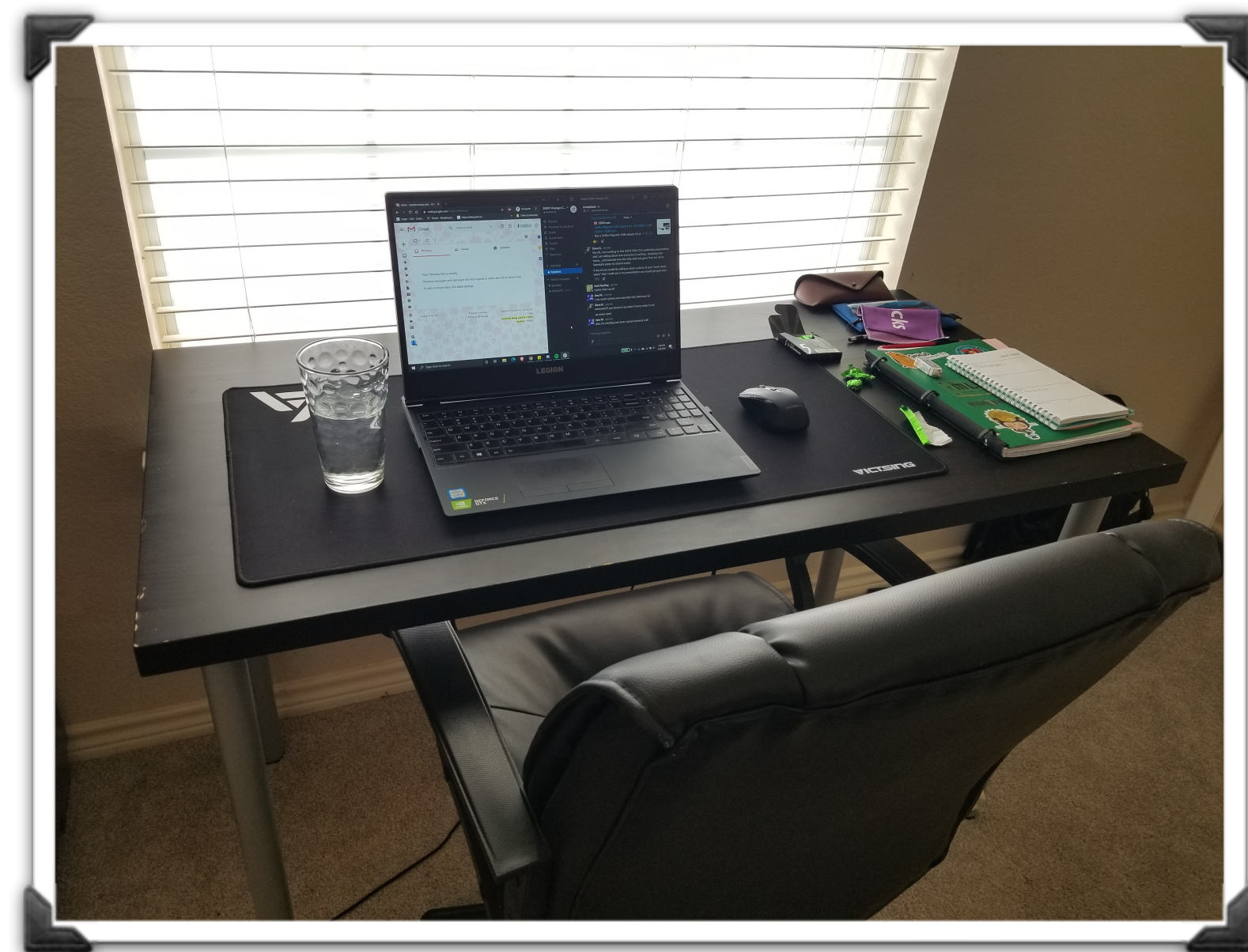


# What if...

Classrooms go from this:



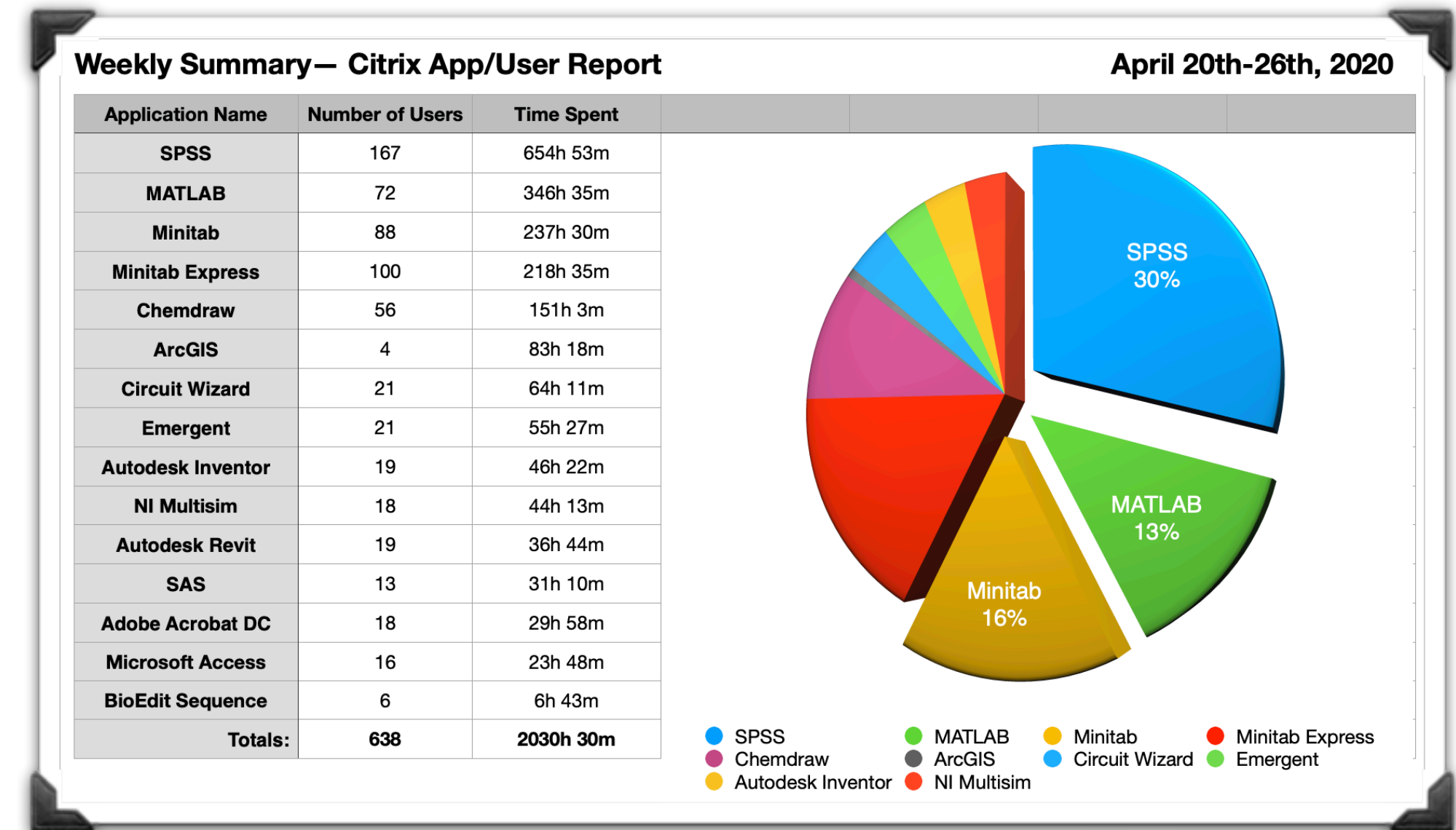
To this...



 From our actually students learning from home.

# Where we are now:

- ▶ Virtualized over 40 Microsoft Windows apps in our environment.
- ▶ All ready in our labs and ATCs [podium computers].
- ▶ Device agnostic.
- ▶ Keep current with security updates.
- ▶ Available on and off campus with no additional software\* or VPN.
- ▶ Near to zero down time. (thanks networking team)







# Where we are now:

## What Faculty have said

*“The access to Minitab and SAS from the Web browser was very helpful to the students and the faculty.*

*The students were able to do their assignments from their own computers (without having to go to the lab especially during the night time).*

*We, the faculty had the advantage of checking our Minitab and SAS programs (from our home) while preparing for our classes that met the next day.”*

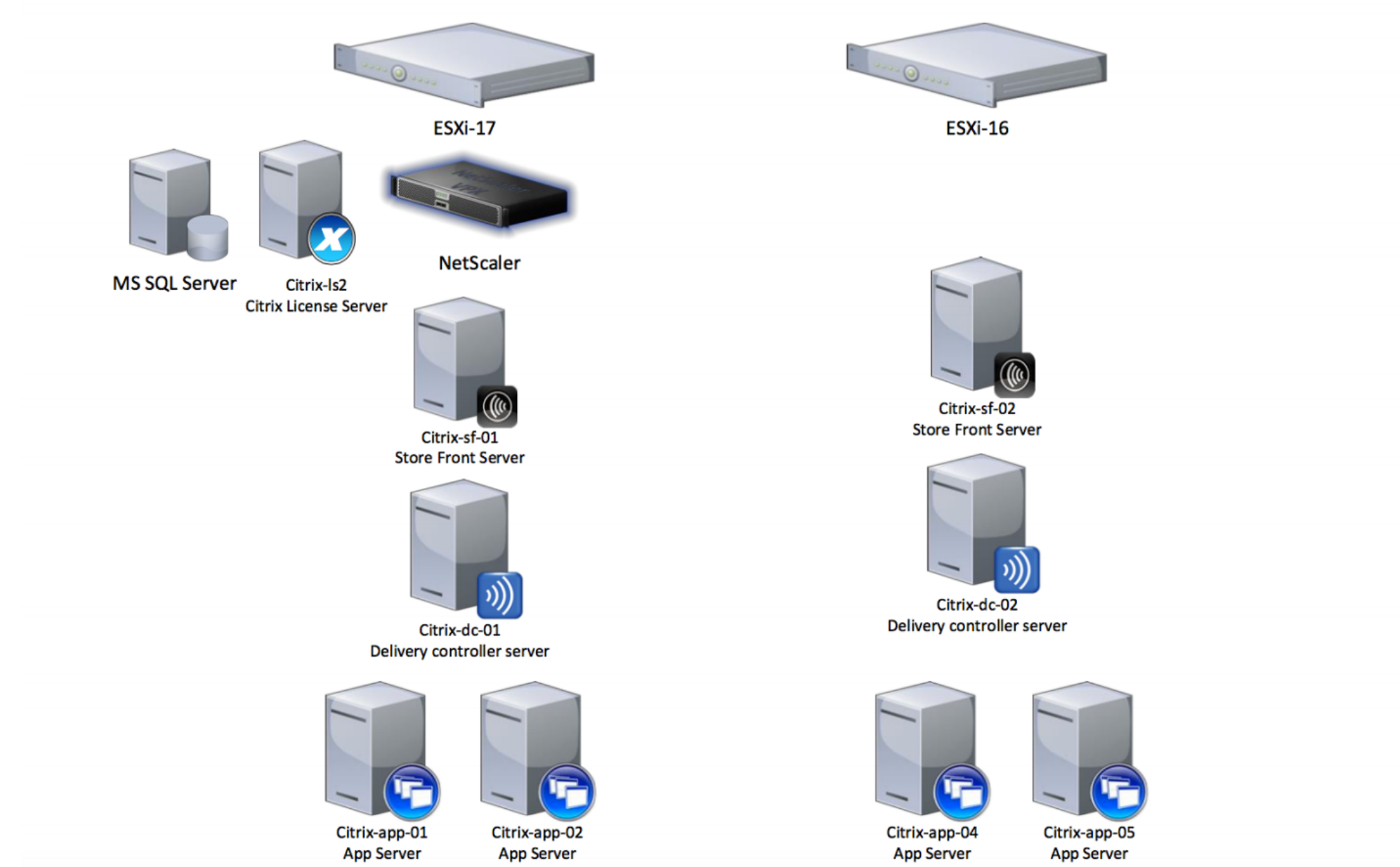
--Ampalavanar Nanthakumar, Faculty, Math Department

# Where we are now:



<https://citrixapps.oswego.edu>

Internal (on campus) Published Apps Citrix Environment



# Where we need to be in the future [now]:

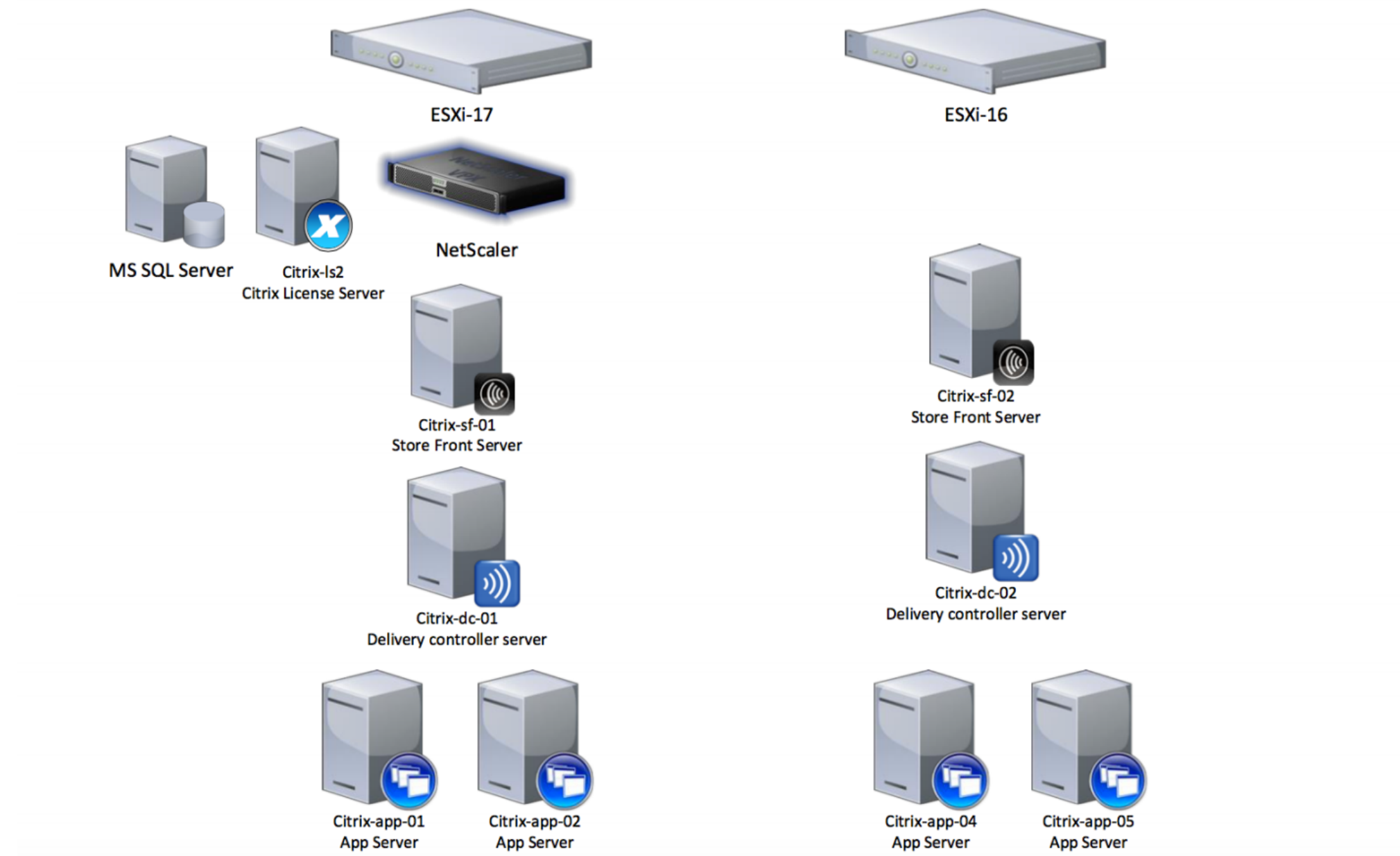
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- ▶ Virtualized lab environments.
- ▶ Be able to dynamically grow VDI or WDS with our needs.
- ▶ Continue to improve customer user experience.
- ▶ Reduce software and hardware costs based from software analytic usage reports. \*Thin Client and repurposed devices.
- ▶ Allow for BYOD to re-shape our physical lab spaces

# Where we need to be in the future [now]:

Internal (on campus) Published Apps Citrix Environment



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# How to get there:

- ▶ Virtualized lab environments.
- ▶ Be able to dynamically grow VDI or WDS with our needs.
- ▶ Continue to improve customer user experience.
- ▶ Reduce software and hardware costs based from software analytic usage reports. \*Thin Client and repurposed devices.
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Demo? Questions?

