

FCC Rural Broadband Panel

August, 2009



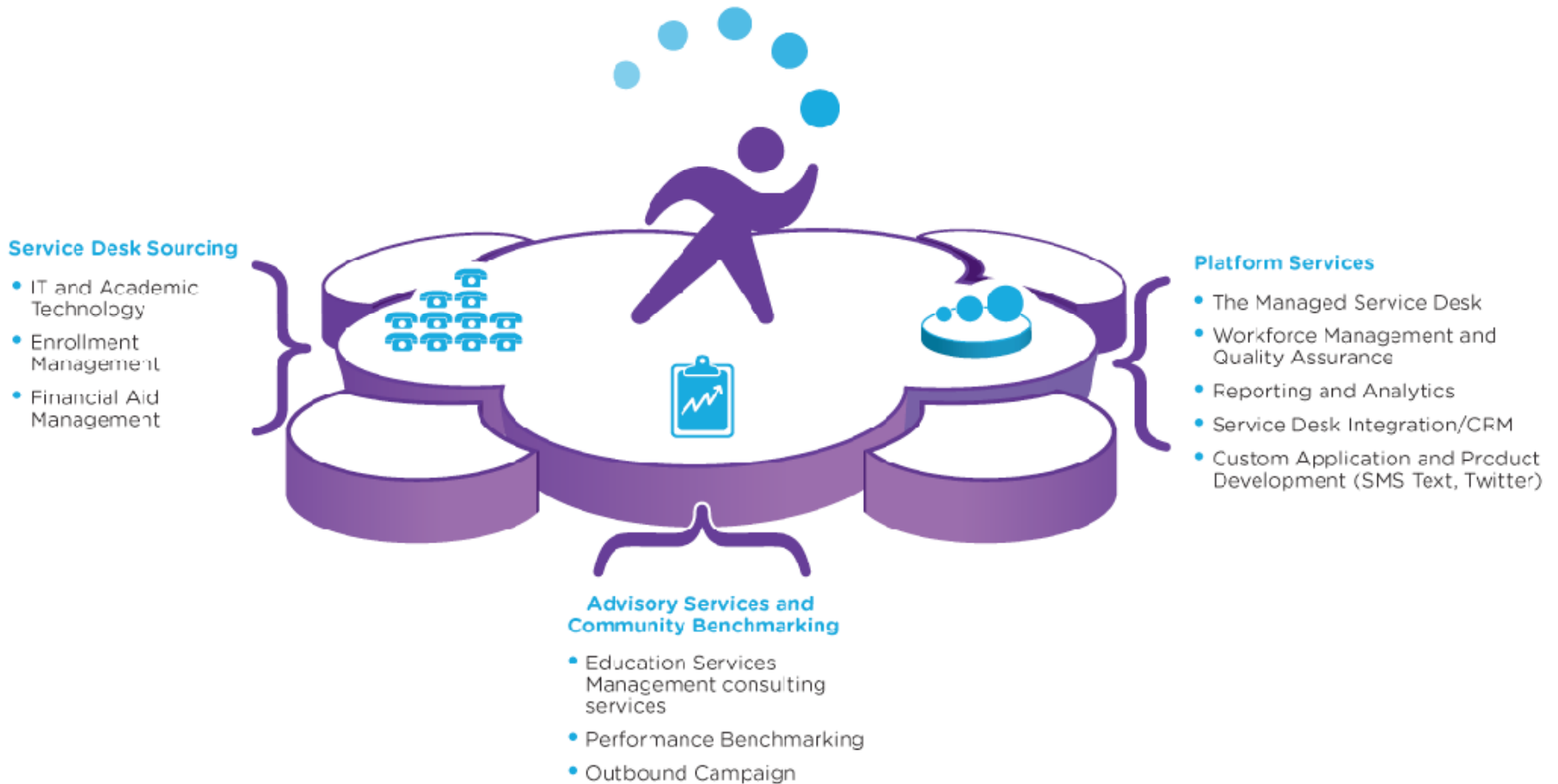
Working Discussion

- I. Who am I?
- II. Observations on today's students
- III. Examples:
 - I. Western Governors University
 - II. Large for-profit K12 institution
 - III. Continuing Education
 - IV. Emergency situations
 - V. Education Providers
- IV. Final thoughts

Background – Christopher Etesse

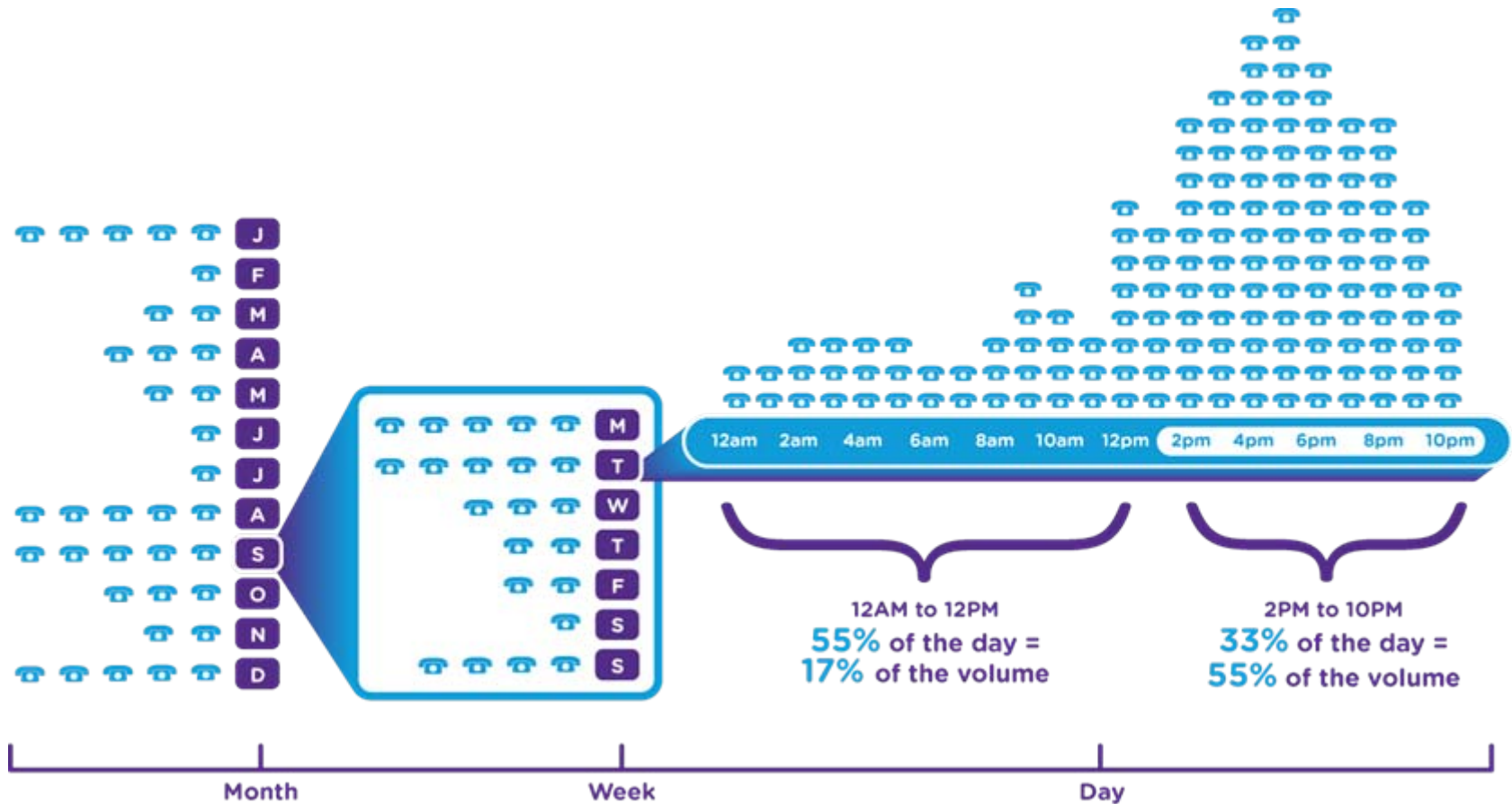
- 13 years of executive experience with top software and Internet companies,
 - Primarily in the education space – all online
 - Part of the generation **completely** post client server technology
- Vice President of Consulting, Information Technology, and Product Development for Presidium Inc. (top 500 company 2 years running)
- CEO of Kadoo Inc. an aggregation and integration of popular web applications, social networks and content management platform for Higher Education.
- Vice President of Government Solutions for Monster (NASDAQ:MNST)
- Vice President of International Services and an early employee with Blackboard (NASDAQ:BBBB), the leading provider of software solutions to the education industry, where he spent 8 years helping to develop products as well as growing the business.
- Masters in Computer Science as well as a BA in American History from the University of Kentucky.

Presidium is a Services Delivery Platform for Education



Common Challenges

- Seasonality and Arrival Patterns
- Staffing and supporting infrastructure



Example - Western Governor's University – formed by 19 state governors

- All online
- Teacher accreditation in 49 states
- \$6,000 versus traditional \$20,000 programs
- Competency based learning – only learn what you need
- Teachers are non-traditional learners – different hours, online, parents as well – rural broadband at home is key
 - To keep their jobs

Example - Large for-profit K to 12 institution

- Charter schools
- District credit for the diploma
- Requirement for broadband access at home
- Expansion capabilities, and learners capabilities limited in some case to true high speed broadband areas
- Open question: Are today's learners and future leaders to be limited to 1980 dial-up speed because of their location?

Example – Continuing Education

- We've seen the seasonality and peak usage timing monthly, daily and hourly
- Broadband in the home allows for that anytime learning
 - Learn at your own pace

Example – Emergency preparation

- Swine flu
- Natural Disasters
- Presidium Support personnel
- How to we continue learn in the event of schools, libraries, etc.. aren't accessible?

Example – Education providers in rural areas

- Rural broadband is not just limited to the final mile
- We need redundant broadband in rural areas to locate our high tech businesses (in the united states)
- For example:
 - Redundant voice
 - And **dual** redundant Internet carriers

Final Thoughts

- It's a math problem:
 - Who doesn't have it?
 - Where are they grouped?
 - Achieve 90% penetration with existing technology such as WiMax, 4G, LTE... etc...
 - ... avoid the misconception we have to dig up the country to achieve the basics broadband promise
- Then we can continue to education tomorrow's leaders – where ever they reside...