Customer Insight: Future proofing your colocation business

With 451 Research and Schneider Electric

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Today’s speakers

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Research Director
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Schneider Electric
Housekeeping Items

Questions?

To ask a question, click on the question button

Presentation Slides

A copy of the presentation will be provided to all attendees

Feedback

Don’t forget to leave feedback at the end of the webinar
Schneider Electric is the global specialist in energy management and automation

**$27.7 billion**
FY 2016 revenues

**43%**
of FY revenues in new economies

**5%**
of FY revenues devoted to R&D

**43%**
of FY revenues as Solutions

**Balanced geographies – FY 2016**

- **28%** North America
- **27%** Western Europe
- **27%** Asia-Pacific
- **18%** Rest of the World

**144,000+ employees**
- c20,000 Sales and Marketing
- c20,000 Software/R&D
- 56% employees in new economies
- 38% of new hires are women

**Over 200 factories worldwide**

**Four integrated and synergetic businesses – FY 2016**

<table>
<thead>
<tr>
<th>Buildings</th>
<th>Industry</th>
<th>Infrastructure</th>
<th>IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>43%</td>
<td>22%</td>
<td>20%</td>
<td>15%</td>
</tr>
</tbody>
</table>

**Largest portfolio in our industry**
In this digital era, we enable a world that is always on.

Our mission is to empower the digital transformation of our customers by ensuring their critical networks, systems, and processes are highly available and resilient.
Insight from colo buyers to colo providers

- 451 Research interviewed 450+ colocation buyers from around the globe to provide actionable guidance for planning
- Research and analysis is summarized into a report, and will be sent to all live webinar attendees after the session
- We will be offering more International Colo Club webinars in 2018
Customer Insight: Future proofing your colocation business

Rhonda Ascierto
Research Director, Datacenters & Critical Infrastructure
A Market in Transition: Changes Ahead

- Customer mix is changing
- Workloads are changing
- No datacenter works alone
- Costs & revenues are changing
- Public cloud is a threat & an opportunity
- Colos are uniquely positioned

By failing to prepare, you are preparing to fail.

- Benjamin Franklin
Colocation

What drives customers today?
What will attract customers in the future?
How to remain relevant?
How to differentiate vs cloud, MSP, other colos?

Goal: specific actions for providers
Who did we survey?

**JOB TITLE**  
- Owner / CEO: 10%
- VP / Director of Operations: 12%
- CTO / CIO: 16%
- VP / Director of IT: 16%
- COO: 12%
- Datacenter Facilities/Operations or Corporate Real Estate Manager: 8%
- Other: 8%

**REVENUE**  
- Over $500m: 22%
- $100m to less than $500m: 14%
- $25m to less than $100m: 17%
- $10m to less than $25m: 23%
- $2m to less than $10m: 13%
- Under $2m: 11%

**PRIMARY INDUSTRY**  
- Financial Services: 11%
- Government/Education: 12%
- Cloud computing provider: 13%
- IT/Technology: 14%
- Manufacturing: 14%
- Media/Content: 13%
- Pharmaceuticals/Healthcare: 14%
- Retail: 8%
- Other: 12%

**REGION**  
- NA (US and CA): 33%
- Western Europe (UK): 11%
- AU: 23%
- China: 33%
Agenda

Reality check

Imperatives for success:

- Be cost-efficient without compromising availability
- Increase agility to meet evolving customer needs
- Build trust through transparency
- Offer value-added services

Takeaways
## Reality check

### Imperatives for success:

<table>
<thead>
<tr>
<th>Imperative</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be cost-efficient without compromising availability</td>
<td></td>
</tr>
<tr>
<td>Increase agility to meet evolving customer needs</td>
<td></td>
</tr>
<tr>
<td>Build trust through transparency</td>
<td></td>
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<tr>
<td>Offer value-added services</td>
<td></td>
</tr>
</tbody>
</table>

### Takeaways
Most have multiple suppliers; are loyal (or locked in) to primary

Q (left). In total, how many colocation providers does your organization lease from?

Q (right). Average number of years with your primary colo provider?

Source: 451 Research, 2017

1. 32%
2. 37%
3. 21%
4. 6%
5. 2%
6 or more. 2%

Less than one year. 2%
1-2 years. 23%
3-4 years. 47%
5-7 years. 21%
8-10 years. 7%
All major cloud hyperscale operators lease space
More customers moved apps from colo to public cloud than in reverse

Q (left). In the past two years, has your organization moved applications from colocation to public cloud (e.g., Amazon Web Services, Microsoft Azure, Oracle Cloud, etc.)?

Q (right). In the past two years, has your organization moved applications from public cloud to colocation?

Source: 451 Research, 2017
Q. What was the main reason why your organization moved applications from colocation to public cloud? n=281

- Public cloud lower cost than colocation: 63%
- Increased functionality with cloud-based software: 59%
- Capacity requirements are unpredictable or fluctuating: 39%
- Enhanced backup options: 32%
Why customers shift workloads

Q. What was the main reason why your organization moved applications from colocation to public cloud? n=281
Q. Why did you move applications from public cloud to colocation? n=186

Source: 451 Research, 2017

<table>
<thead>
<tr>
<th>Reasons for moving apps from colocation to cloud</th>
<th>Reasons for moving apps from cloud to colocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public cloud lower cost than colocation</td>
<td>Latency or performance issues with public cloud</td>
</tr>
<tr>
<td>Increased functionality with cloud-based software</td>
<td>Colocation less expensive than public cloud</td>
</tr>
<tr>
<td>Capacity requirements are unpredictable or fluctuating</td>
<td>More predictable costs per month (accounting)</td>
</tr>
<tr>
<td>Enhanced backup options</td>
<td>Security (risk) concerns</td>
</tr>
</tbody>
</table>
<pre><code>                                                | Application changed from test/dev to production|
                                                | Regulatory requirements                        |
</code></pre>
<p>| 63%                                             | 47%                                             |
| 59%                                             | 45%                                             |
| 39%                                             | 39%                                             |
| 32%                                             | 37%                                             |
|                                                 | 34%                                             |
|                                                 | 13%                                             |</p>
Reality check

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Takeaways
Top criteria for choosing a colocation provider

Q. Rate each of the following for their importance when selecting a provider of colocation services.

Source: 451 Research, 2017
Most customers require facility-level redundancy from colocation

Q. When leasing colocation space, what level of redundancy is mostly required – for electrical systems and for cooling systems?

Source: 451 Research

<table>
<thead>
<tr>
<th></th>
<th>Electrical</th>
<th>Cooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>2N</td>
<td>10%</td>
<td>14%</td>
</tr>
<tr>
<td>N+2</td>
<td>37%</td>
<td>36%</td>
</tr>
<tr>
<td>N+1</td>
<td>31%</td>
<td>27%</td>
</tr>
<tr>
<td>N</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Don't know</td>
<td>19%</td>
<td>20%</td>
</tr>
</tbody>
</table>
Action point: Market the security, highly availability of facilities

Provide specific details on datacenter architecture, incl. equipment redundancy

Include this information in the overall marketing of services
Polling question

As a colocation provider, do you believe customers would be more willing to lease space if you installed the following technologies in your datacenter?

1. Datacenter infrastructure management (DCIM) software
   • Yes
   • No

2. Lithium-ion batteries
   • Yes
   • No

3. On-demand prefabricated modular capacity
   • Yes
   • No
### Efficiency technologies attract customers

Q. Would you be willing to use a colo provider that deployed the following technologies?

Source: 451 Research

<table>
<thead>
<tr>
<th>Technology</th>
<th>More willing</th>
<th>Less willing</th>
<th>Not a factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium-ion batteries</td>
<td>50%</td>
<td>19%</td>
<td>31%</td>
</tr>
<tr>
<td>DCIM (datacenter infrastructure management) software to monitor the entire facility</td>
<td>65%</td>
<td>16%</td>
<td>19%</td>
</tr>
<tr>
<td>Open Compute Project-ready white space</td>
<td>51%</td>
<td>20%</td>
<td>29%</td>
</tr>
<tr>
<td>On-demand prefabricated modular capacity</td>
<td>57%</td>
<td>19%</td>
<td>24%</td>
</tr>
<tr>
<td>Efficient direct fresh-air cooling</td>
<td>57%</td>
<td>16%</td>
<td>27%</td>
</tr>
<tr>
<td>Efficient indirect fresh-air cooling</td>
<td>42%</td>
<td>23%</td>
<td>35%</td>
</tr>
</tbody>
</table>

COMMISSIONED BY SCHNEIDER ELECTRIC, N=454
Reality check

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Takeaways
Metered chargeback is becoming more popular

Q. Would your organization prefer bundled colocation services or a metered chargeback method?
Source: 451 Research

- Bundled (flat cost per month that includes rack/cabinet price plus the cost of a set amount of power): 35%
- Metered usage (flat cost per month for the rack/cabinet plus the cost of the power used by the IT equipment): 30%
- Combination of both: 28%
- Don’t Know: 7%
Action point: Be cost-predictable

Monitor customer costs/usage on an ongoing basis

Avoid surprises – communicate changes effectively & in a timely manner
Datacenter strategy for edge computing

Q. For data that will need to be processed close to its source or user (for e.g., for edge computing or for Internet of Things initiatives), which of the following best describes your likely datacenter strategy for the next 2-3 years? n=454

Source: 451 Research

- Mostly using our own, private datacenters: 12%
- Mostly using colocation providers’ datacenters: 26%
- A mix of our own, private datacenters and colo datacenters: 38%
- Mostly outsourced to a public cloud service provider (AWS, Microsoft, Google, etc.): 15%
- Mostly outsourced to a network operator/or infrastructure third party, such as a telco: 3%
- We are undecided and watching which suppliers or types of suppliers offer this capability: 6%
Action point: Investigate/invest in connectivity options

Enable connectivity to a widening set of datacenters, including public cloud & other service providers

Partnering will be critical
Customers prefer incremental capacity in small chunks

Q (left). In what increments is it most ideal for your business to scale or grow its datacenter space (by number of racks)?

Q (right). When you need to expand capacity at a colocation provider, would you prefer to see space that is already built out or would you prefer to wait to have space customized to your organization’s specifications?

- **Ideal growth by number of racks**
  - Fewer than 5 racks at a time: 18%
  - 5-10 racks: 26%
  - 11-19 racks: 37%
  - 20-50 racks: 15%
  - More than 50 racks: 4%

- **Preference when expanding at a colo**
  - 37% Prefer to wait to have space customized to my organization’s specifications
  - 63% Prefer to see space that is already built out
Action point: Be responsive to customers’ capacity needs

- Capability to readily deploy small increments of ready-to-use space
- Offer private suite options
- Investigate prefabricated modular (PFM) datacenter infrastructure
Reality check

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Action point: Understand customers’ digital infrastructure strategy

Ask exactly what qualities & services customers seek across their total digital infrastructure strategy

Be prepared to address questions about data routes, recoverability, compliance & security across multiple datacenters
Top transparency requirements for leased space

Q. When it comes to transparency of your leased space in colos, please rank the importance of following options?

- Monitoring
  - Real-time alarms when exceeding thresholds (power usage, environmentals)
  - 24/7 monitoring of environmentals in leased space

- Consistent view of key metrics

- Tracking assets in leased space

- Knowing when the colo will conduct maintenance

- Tracking remote hands
Visibility into remote-hands services attracts customers

Q. If you were able to monitor/track remote-hands services from your colocation provider (that is, technical work carried out on your equipment by the colocation provider) via a secure online portal, which of the following best describes the likely outcome?

Source: 451 Research

- We already use remote-hands services but would use more of these services if we could remotely monitor the work being done via a portal: 46%
- We do not use remote-hands services but would be more likely to do so if we could remotely monitor the work being done via a portal: 41%
- Visibility via a portal would make no difference to whether or not we would use remote-hands services from our colo provider: 13%
Action point: Invest in transparency

Enable monitoring of the entire colocation datacenter

Share select data with customers through customized dashboards
Reality check

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Takeaways
Customers are looking for help
Top cloud & hosting services

<table>
<thead>
<tr>
<th>Infrastructure Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hosted private cloud</td>
</tr>
<tr>
<td>• Basic website hosting</td>
</tr>
<tr>
<td>• Dedicated servers</td>
</tr>
<tr>
<td>• Public cloud/IaaS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Application Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Security</td>
</tr>
<tr>
<td>• Email, unified collaboration and productivity</td>
</tr>
<tr>
<td>• Networking services</td>
</tr>
<tr>
<td>• Web</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Security Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Web application firewall</td>
</tr>
<tr>
<td>• Endpoint security</td>
</tr>
<tr>
<td>• Encryption of confidential data stored in the cloud</td>
</tr>
<tr>
<td>• Advanced anti-malware/anti-APT</td>
</tr>
</tbody>
</table>
Customers want cloud services in same datacenter as colocated IT

Q. How important is it that cloud services be hosted in the same datacenter as your colocated IT infrastructure equipment?

- Very important (4): 32%
- Somewhat important (3): 50%
- Not very important (2): 12%
- Not at all important (1): 6%
Action point: Go beyond just leased space...carefully

- Broaden service offerings beyond just colocation
- Use customer-centric approaches – be deliberate with initiatives
Reality check

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Takeaways
Future proofing your datacenter

Successful colos = trusted partner - an extension of on-premises capacity

Cost predictability & visibility are key

So are agility & cost... but not at the expense of availability

Demand for enhanced connectivity & additional services will grow
Thank you for joining us

• More insights can be found by downloading the free report

• All attendees of the live broadcast will be sent the full report

• For any attendees of the recorded broadcast, you can download the report here: https://www.schneider-electric.com/promo/get.cfm?keycode=59936M