STKI 2016 Ratios
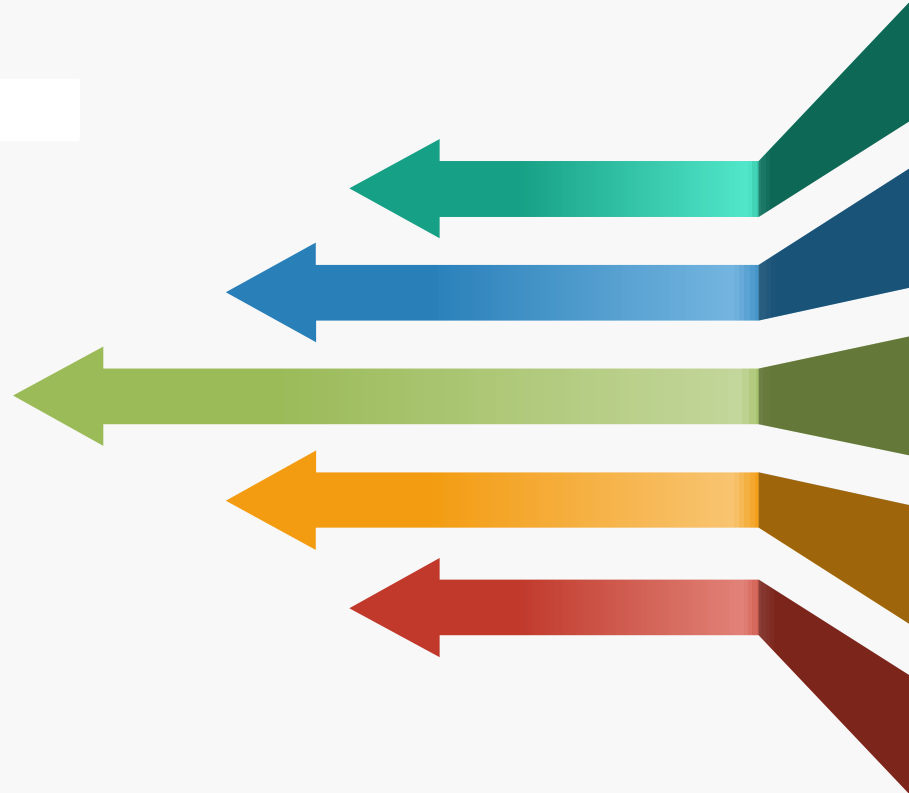
- PC support
- Security
- Networking
- Storage
- Servers
- NOC
- Data Center
- DBA
- Enterprise System Management

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2016 PC Support Ratios

- Support Per PC for FTE

Per FTE	Service Desk	Second Level	Third – Image	Total Support per PC
25 percentile	338	27981	1188	159
Median	**500**	**429**	**1938**	**193**
75 percentile	729	847	3625	338

- Support per Employee for FTE

Source: STKI

Per FTE	Service Desk	Second Level	Third – Image	Total Support per Empl.
25 percentile	338	213	1213	114
Median	**450**	**359**	**2250**	**176**
75 percentile	702	656	3000	303

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IT security personal

- Number of employees (that use computers) divided to total number of security related IT personal

Per FTE	# employees / # IT security personal
25 percentile	270
Median	**571**
75 percentile	750

Source: STKI

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Networking active ports ratio

- Number of active ports divided to total ports:

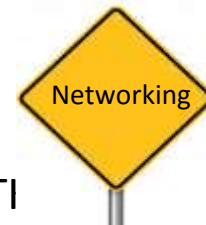| Per FTE	Active ports ratio - total	Active ports ratio - DC
25 percentile	50%	63%
Median	**60%**	**83%**
75 percentile	75%	89%

Source: STKI

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Networking personal ratio

- Ports per network personal

Per FTE	# active ports per data personal	# total ports per data personal	# dc active ports per dc network personal	# dc total ports per dc network personal
25 percentile	1000	1667	175	250
Median	1111	2000	263	500
75 percentile	2000	2400	444	625

Networking

Source: STI

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Usable/Raw storage ratio

- Net Storage in this research – usable for applications:
  - After Raids
  - After replication to DRP
  - Without VTL's
  - The term "Usable storage" is tricky since with snapsactives application can see more storage then "Raw storage"

NET\RAW	Ratio
25 percentile	32%
Median	**40%**
75 percentile	63%

Source: STKI

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Storage Ratios

- Number of Raw PB and Usable PB per Storage Staff Member FTE (including backup and DRP of storage):

Per FTE	RAW Storage	Usable Storage
25 percentile	0.23P	0.12P
Median	**0.67P**	**0.24P**
75 percentile	1P	0.4P

Source: STKI

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Server Ratios - Windows

- Number of Windows Servers (logical) per System member

Per FTE	All Win Servers	Prod Win Servers
25 percentile	100 servers	67 servers
Median	**125 Servers**	**75 Servers**
75 percentile	222 Servers	129 servers

- Server is either physical or virtual
- This <u>includes</u> SBC\VDI (Citrix\WTS\Jetro) support

Source: STKI

- For development environment's ratios can grow up to   600 servers per FTE
- Organizations with 100% identical servers in branches can get ratios up to 1500 servers per FTE
- Sometimes (separate) virtualization team gives services to both Windows and Linux

Percent of Production Windows server from all Windows servers

Per FTE	Percent of prod servers
25 percentile	50%
Median	**60%**
75 percentile	70%

Server is either physical or virtual

Source: STKI

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How many users are supported by SBC (Terminal Server\VDI) FTE

Per FTE	Users per SBC FTE
25 percentile	375
Median	**825**
75 percentile	1942

Source: STKI

Users and not concurrent users

Users might work completely on SBC or partly (just deliver several applications)

The heavy SBC users (above 7500 users) will have "mini team" of 3-4 FTE

The rest of the users will have 0.5 to 1 FTE as part of the general system team

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NOC, Operators Ratio*

- Number of production servers per NOC person:

Per FTE	Servers (win total, linux, unix)	Servers (win prod, linux, unix)
25 percentile	128 servers	74 servers
Median	**230 Servers**	**155 servers**
75 percentile	301 Servers	213 servers

- Organizations will have generally 1 person in the day and 2 people at evening\night (if organization is used to have changes during the night)
- Huge variety of NOC responsibility:
    - Look only at monitoring screens
    - Batch operations (both production Control-M, FTP, and infra such as backup)
    - Change management , Service desk during night
    - Physical room – electricity, cooling
- Mostly 7*24 with\without Saturday
- In organizations with no NOC the Service Desk will have to look at the monitoring screens
- MF AS/400 not included in count

Source: STKI

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DBA Ratios

- Number of open applications (all instances – dev, test, prod counted as 1) supported by DBA (very big variations… the developer ratios might be better)

Per FTE	# of applications
25 percentile	12
Median	**31**
75 percentile	45

Source: STKI

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DBMS Support Ratios

- Number of developers (in the Open) supported by DBA FTE

Per FTE	# of developers
25 percentile	13
Median	**15**
75 percentile	33

Source: STKI

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SOA\ESB ratio

- "Interfaces" are defined and architected differently (example – "unique customer data interface" for all applincations vs. several "customer data interface per each application")

Per FTE	# of interfaces / # esb-soa team
25 percentile	85
Median	**100**
75 percentile	151

Source: STKI

ESM (Enterprise System Management) support ratio

- Numbers of servers in Open (Win –prod , Linux, Unix) covered by ESM team (including BSM, CMDB, etc. – if implemented)
- MF AS/400 not included in server count – significant bias. Best metric is "per CI monitored…".

Per FTE	# of Servers (all)
25 percentile	106
Median	**398**
75 percentile	633

Source: STKI

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ESM (Enterprise System Management) support ratio per CI

- Numbers of CI (Configuration Item) in ESM covered by ESM team (including BSM, CMDB, etc. – if implemented)

- MF AS/400 not included in server count – significant bias. Best metric is "per CI monitored…".

- The big variety demonstrates the large difference in ESM status (quality and type of monitoring)

- Data is from last year

Per FTE	# of Servers (all)
25 percentile	963
Median	**3000**
75 percentile	5417

Source: STKI

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