STKI Ratios TOC

- PC support
- Security
- Networking
- Storage
- Servers
- NOC
- Data Center
- DBA
- Enterprise System Management
- BI
- ERP
- Portal
- OCIO

PC Support Ratios

- Support Per PC for FTE

Per FTE	Service Desk	Second Level	Third – Image	Total Support per PC
25 percentile	188	250	1500	100
Median	**315**	**450**	**3200**	**126**
75 percentile	589	567	4000	247

- Support per Employee for FTE

Source: STKI

Per FTE	Service Desk	Second Level	Third – Image	Total Support per Empl.
25 percentile	225	300	1500	124
Median	**300**	**438**	**3000**	**152**
75 percentile	475	567	4000	193

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Security personal ratio

- Number of Security personal in IT as percentage of total IT employees:

Per FTE	Security % IT personal
25 percentile	2.2%
Median	**3.6%**
75 percentile	5%

Source: STKI

Networking active ports ratio

- Number of active ports divided to total ports:

Per FTE	Active ports ratio
25 percentile	62%
Median	**67%**
75 percentile	79%

Source: STKI

Networking personal ratio

- Number of active ports divided to network staff members (voice + data):

Per FTE	# of active ports
25 percentile	500
Median	**1000**
75 percentile	1800

Source: STKI

Storage Size and Growth in Selected Industries

Industry	2012 1Q Size RAW	2013 1Q Size RAW	Planned Growth per year
Defense	500T-6P	1P-8P	50%- 75%
Finance	600T-1.3P	600-2.5P	25% - 75%
Health	140T-550T	300T-1500P	30%-50%
Manufacturing – Retail	100T-250T	200T-800T	20%-50%
Telco	2P-3P	2P-5P	30%-50%
Governmental \Public	100T-300T	100T-400T	25%-100%

Actual storage growth is based on procurement cycles

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 snapshots application can see more storage then "Raw storage"
- Slowly (but surely) the net/raw percentage is growing

NET\RAW	Ratio
25 percentile	25%
Median	**50%**
75 percentile	70%

Source: STKI

Storage Ratios

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

Per FTE	RAW Storage	Usable Storage
25 percentile	148T	75T
Median	**350T**	**128T**
75 percentile	575T	301T

Source: STKI

- The ratios have increased dramatically. This means that storage staff is understaffed!

Server Ratios - Windows

- Number of Windows Servers (logical) per System member

Per FTE	All Win Servers	Prod Win Servers
25 percentile	96 servers	55servers
Median	**117 Servers**	**73 Servers**
75 percentile	145 Servers	92servers

  - Result is similar to last's year
  - Server is either physical or virtual
  - This includes SBC\VDI (Citrix\WTS\Jetro) support
- 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

Source: STKI

Percent of Production Windows server from all Windows servers

Per FTE	Percent of prod servers
25 percentile	50%
Median	**64%**
75 percentile	73%

Server is either physical or virtual

Source: STKI

Percent of SBC FTE vs. total FTE (system)

Source: http://www.willowbrookcentral.org/new-years-day-willowbrook-dont-miss-it.html

Per FTE	Percent of SBC FTE from total System FTE
25 percentile	17%
Median	**27%**
75 percentile	38%

Organization with significant SBC (Terminal Server\VDI)

Source: STKI

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

Source: http://www.willowbrookcentral.org/new-years-day-willowbrook-dont-miss-it.html

Per FTE	Users per SBC FTE
25 percentile	333
Median	**1271**
75 percentile	3000

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

Source: STKI

NOC, Operators Ratio*

- Number of production servers per NOC person:

Per FTE	Servers (win, linux, unix)
25 percentile	73 servers
Median	**108 Servers**
75 percentile	196 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
- Last's year data

Source: STKI

Datacenter used space- production

- Net size of Datacenter vs. gross size of Datacenter

Per FTE	Percent of DC used
25 percentile	50%
Median	**73%**
75 percentile	81%

- When considering that at least 20% of DC room is needed to “move and breath” the conclusion that 75% of organization has used all space in their DC!

Source: STKI

DRP Datacenter space vs. Prod Datacenter space

- Net size of Datacenter vs. gross size of Datacenter

Per FTE	Percent of DC used
25 percentile	28%
Median	**41%**
75 percentile	71%

Source: STKI

DBA Ratios*

- Number of open applications (all instances – dev, test, prod counted as 1) supported by DBA :

Per FTE	# of applications
25 percentile	17
Median	**25**
75 percentile	37

- Last's year data

Source: STKI

DBMS Support Ratios

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

Per FTE	# of developers
25 percentile	10
Median	**16**
75 percentile	26

Source: STKI

ADBA vs. DBA ratios

- What is the ratio of Application DBA from total DBA's (in the Open):

Per FTE	ADBA/total DBA
25 percentile	33%
Median	**40%**
75 percentile	50%

Source: STKI

ESM (Enterprise System Management) support ratio

- Numbers of servers in Open (Win, 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…”.
- Data about “not capable ESM teams – above 1000 servers per FTE” not included

Per FTE	# of Servers (all)
25 percentile	227
Median	**412**
75 percentile	485

- About the same as last years data

Source: STKI

Israel – DW/BI Staffing ratio

- Average Israeli ratio: BI/DW is **6% of IT department** (compared to 4.3% abroad – source: Computer Economics)
- **An average of 8 DW/BI employees in Israeli organizations**
- Insourcing trend continues
- But organizations will look for outside help in analytics

ERP Staffing ratios in Israel

- Average size of Israeli ERP department:

  15 employees

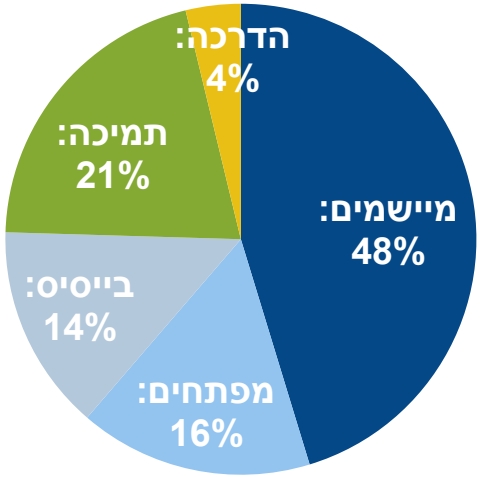
- Clear link between degree of customizations, nature of implementation and size of ERP staff (next slides)
- Percent of ERP employees from entire IT department: **8-10%** (ranged from 3%-45%)
- Average ratio ERP staff / ERP users: **1: 52 - 1:80**

Ratio abroad: 1:31 in multiple versions installations, 1:40 for single version installation (Source: Computer Economics)

SAP staffing in Israel

50% of ERP SAP department is implementers!
(who perform many of the other tasks)

חלוקת תפקידים מחלקות SAP



Source: STKI survey

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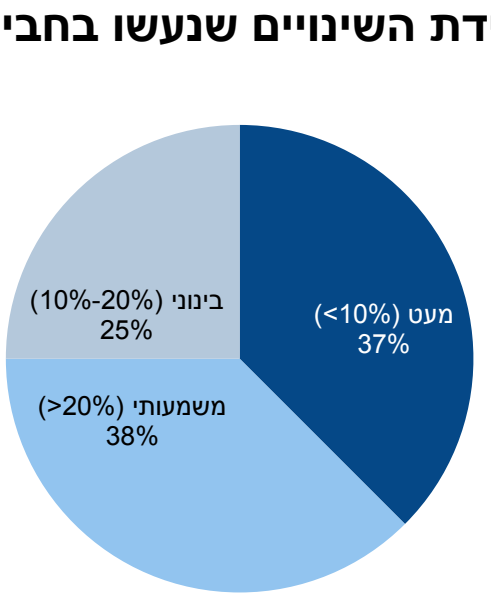
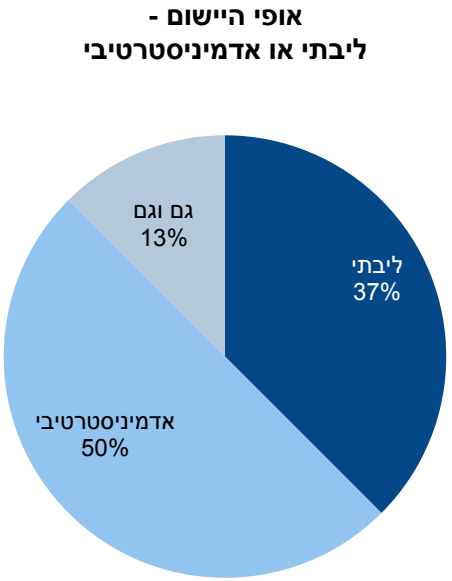
Size of ERP department depends on:



Source: STKI survey

And on type of use:



Source: STKI survey

Portal Staffing ratio in Israel

- Average number of employees dedicated to portals in Israel: **2.5 employees** (~2% of IT department)
- In 70% of organizations, **portal is under the IT department**

Small departments, also doing other things
(i.e Internet, document management)

OCIO Staffing Ratio

- **Average size of Israeli OTC department: 3-7**
  - **~3 %** of IT staff (between **0.5% - 10%!**)
  - Compared to **~7-14.6%** in global orgs

OCIO department has doubled in recent years

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