



# Συνολικό κόστος κτήσης (TCO) για ΠΣ ERP

---

ΜΑΘΗΜΑ: ΠΛΗΡΟΦΟΡΙΑΚΑ ΣΥΣΤΗΜΑΤΑ ΔΙΟΙΚΗΣΗΣ  
ΚΑΙ ΕΠΙΧΕΙΡΗΣΙΑΚΩΝ ΠΟΡΩΝ

ΔΙΔΑΣΚΩΝ: ΔΡ. Δ. ΣΤΑΜΟΥΛΗΣ

*For IT, TCO includes hardware and software acquisition, management and support, communications, end-user expenses and the opportunity cost of downtime, training and other productivity losses*

GARTNER GROUP

# Συνολικό κόστος κτήσης

(total cost of ownership)

---

$$\text{TCO} = \text{I} + \text{O} + \text{M} + \text{D} + \text{P} - \text{R}$$

**I** Initial Cost      **O** Cost of Operation      **M** Cost of Maintenance      **D** Cost of Downtime      **P** Cost of Production      **R** Remaining Value

# ERP TCO

---

Up-front cost for hardware, software and implementation, support and maintenance costs.

Gartner:

- the initial license and implementation costs of an ERP system = only 15% of the total TCO
- ongoing operational costs accounting for 85%.

Most ERP system vendors charge an annual maintenance fee, approx. 15 – 20% of the whole purchase price. This is a positive thing, as it ensures the continuous product support, bug fix services, system updates etc.

# Direct and indirect costs

---

Direct costs are those that can be directly attributed to the ERP system, such as licensing fees, professional services for software installation and customization, hardware installation and maintenance, and training and support for the users. These costs are easy to quantify and estimate, and they are typically incurred during the implementation and initial deployment phases.

Indirect costs, on the other hand, are less tangible and more difficult to measure, but they can have a significant impact on the TCO. Examples of indirect costs include lost productivity during the learning phase, process redesign and reengineering, data migration and integration, ongoing maintenance and upgrades, and the additional IT infrastructure required to support the ERP system.

# ERP TCO elements

---

System hardware and software costs

Server hardware and software costs

Workstation hardware and software costs

Installation and integration costs

Data migration costs

Risk management costs

Infrastructure enhancement costs

Power costs

# ERP TCO elements

---

Quality assurance/testing costs

Downtime and outage costs

Reduced productivity costs

Security risks

Backup systems and recovery costs

User training costs

Process audit costs

Process re-engineering costs

Insurance costs

# ERP TCO elements

---

Special personnel costs

Project management costs

Future upgrade costs

Legacy system take-down costs



# Data migration

---

- the core component of ERP implementation.
- upgrade from version to version of the same ERP system, handle data conversion carefully.
- make sure proper executives take ownership of their data.
- test at every process level – to ensure the integrity of the data.

As example, making a sales order will be impossible when the table of addresses cannot be read.

## ERP Total Cost of Ownership Elements

---

Project management costs Infrastructure enhancement  
Special personnel costs **Training and user adoption**  
Data migration costs Process auditing costs  
Security risks Insurance costs Legacy platform take-down  
**Networking hardware and software costs** Process re-engineering costs  
Server hardware and software costs Risk management  
Backup systems and recovery **Power costs**  
Quality assurance and testing  
Reduced productivity costs Downtime and outage costs  
**Installation and integration**

# Types of costs

---

Risk management costs should cover potential vulnerabilities, upgrade availability, future license management etc.

Reduced productivity costs deal with user adoption time period, decreased money-making ability.

Security issues include potential breaches, loss of brand reputation, recovery and future prevention matters.

Maintenance fees are considered at 15 – 25% of the licensing costs. Among the main reasons why companies pay these fees is, actually, to get updates to products. Maintenance is usually calculated at 12 cents of every \$1 spent. In this regard, how are support services different, one may ask? Implementing the ERP system requires both technical and project management skills of high level.

## TCO COST CATEGORIES

### Starting Costs

- Software
- Hardware
- Implementation
- Data migration
- User licenses
- Training
- Integrations
- Customization

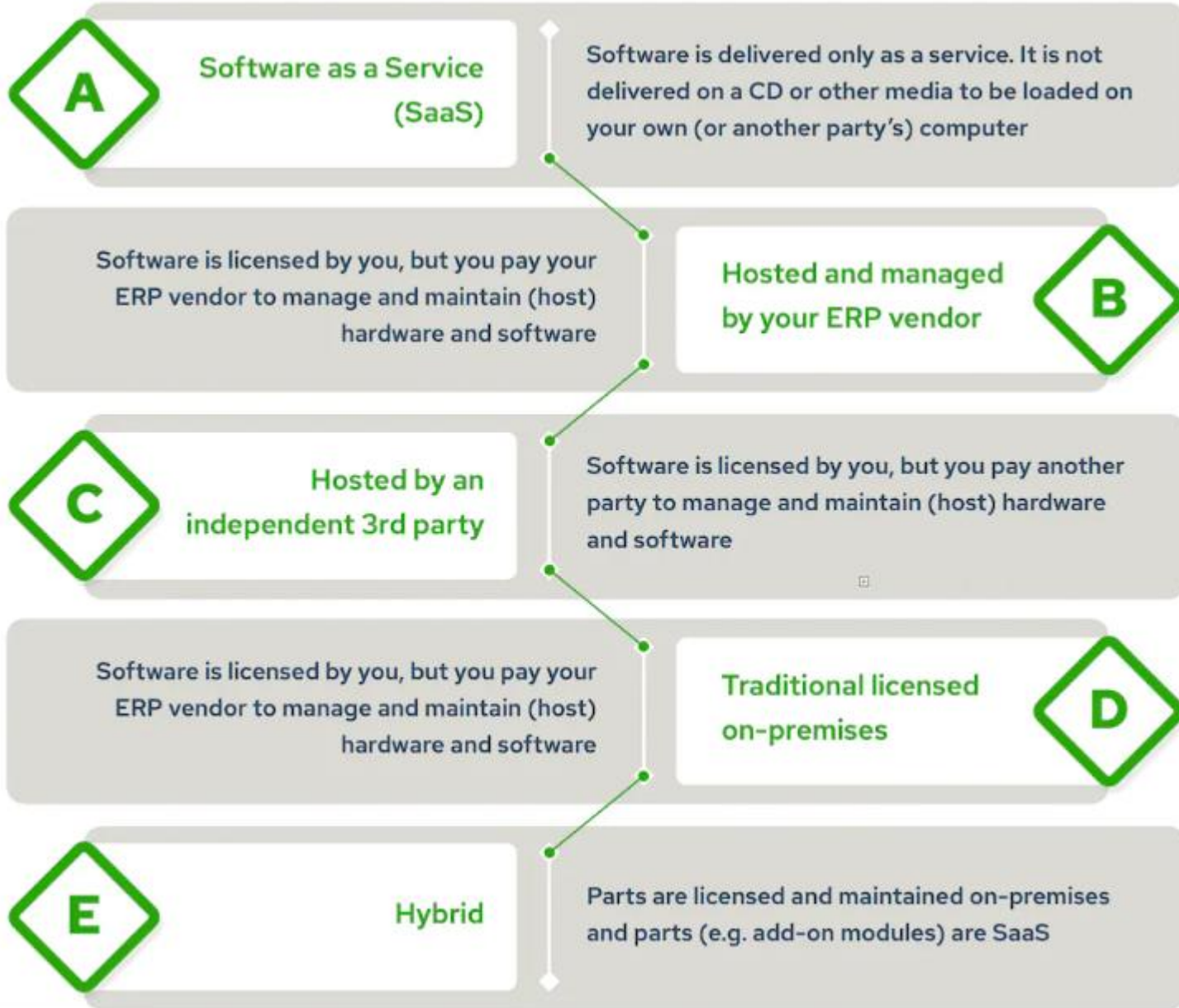
### Operation Costs

- Maintenance and Support
- Bug Fixes
- User licenses
- User and Admin Support
- Upgrades
- Backups and Recovery
- Downtime
- Security

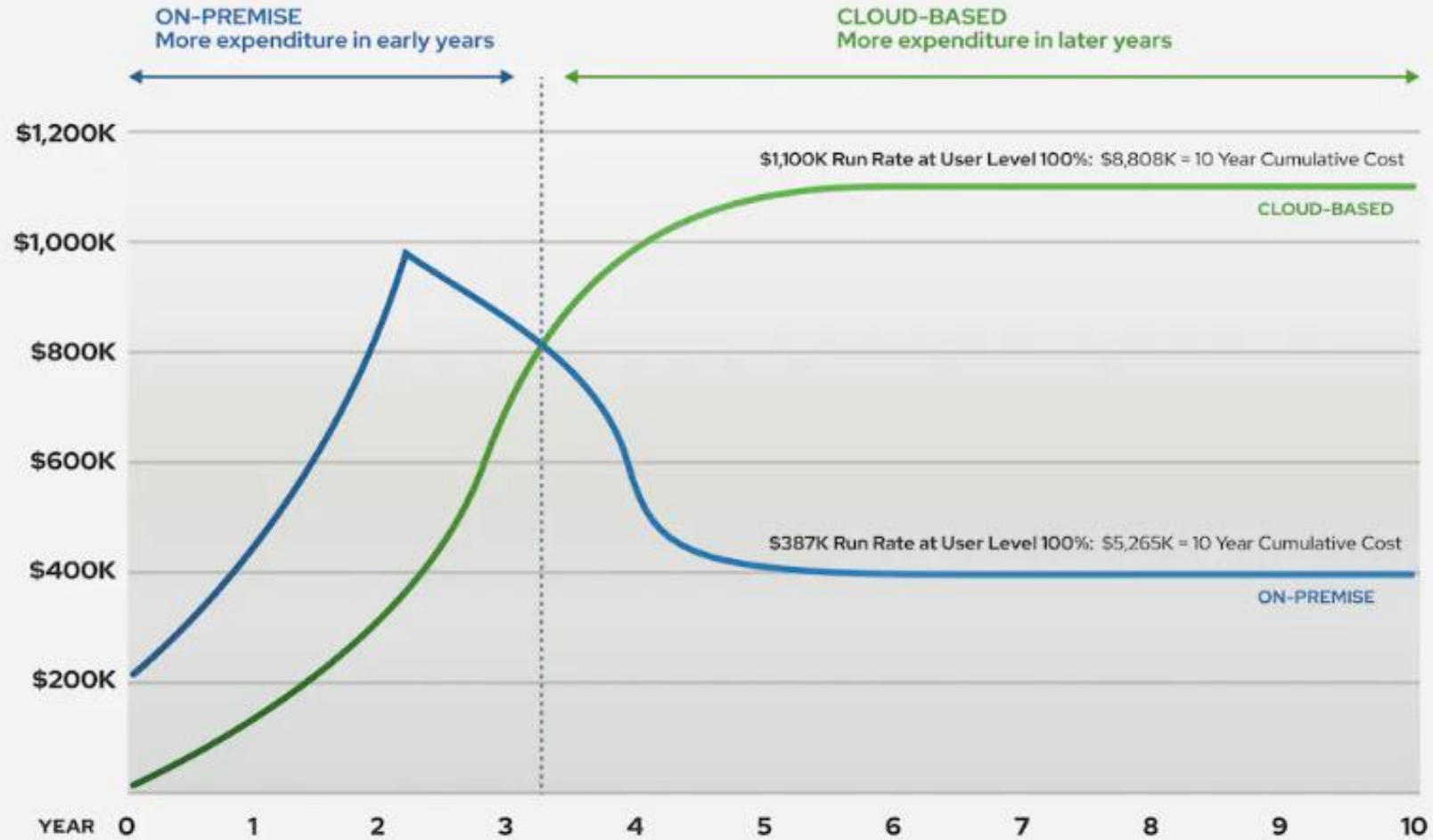
# Watch the video

---

[How Much Does a New ERP Cost? Part One: TCO \(inteltech.com\)](https://www.inteltech.com/erp-cost-part-one-tco)



# Cloud vs. On-Premise ERP Costs Over Ten Years



SOURCE: Fisher, C. (2018) Cloud versus On-Premise Computing. American Journal of Industrial and Business Management

# Your "Best Fit" Software Comparison

Industry  
Chemical

Manufacturing Mode  
Configure To Order (CTO)

Company Size  
\$1 to 10 Million

Technology  
Ecommerce Integration

1

Additive Manufacturing

Configure To Order (CTO)

Discrete Manufacturing

Engineer to Order (ETO)

Industrial Distribution

Job Shop / Machine Shop

Light Assembly (ATO) / Kitting

Make to Order (MTO)

Mixed Mode Manufacturing

[Clear](#)

[Close](#)



## ERP Software Product Comparison for

Filter down to compare all ERP system specifications

[Copy Sharable Link](#)

## Configure To Order (CTO), \$1 to 10 Million, Ecommerce Integration

Compare costs to implement, customer retention rates and other key features and capabilities

1 ERP SYSTEM FOUND

[GET 1 FREE DEMO](#)

[GET 1 P](#)

<https://www.top10erp.org/erp-software-comparison/best-fit/>



# Evolution over time: Legacy vs SaaS Total Cost of Ownership

---

## TCO over 5 years

