

## Total Cost of Ownership (TCO) - ASP Model

The Total Cost of Ownership (TCO) model created by Info-Tech Research Group provides organizations with a framework for managing IT costs at strategic and daily operational levels. The model breaks IT costs into two categories: direct and indirect. The table below lists the various costs associated with each category. Due to the highly subjective nature of a TCO calculation, this should not be taken as an exhaustive list. There are spaces within each section of the TCO spreadsheet to add other cost categories as required.

An **application service provider (ASP)** is a business that provides computer-based services to customers over a network.

Direct Costs	
<b>Hardware &amp; Software</b>	The capital expenditures and lease fees for servers, client computers, peripherals, network components, and software.
<b>Management</b>	The costs associated with network, system and storage management, including labor staffing, maintenance contracts, and professional services or outsourcing fees.
<b>Support</b>	The support staff labor hours and costs, training labor and fees, travel, support contracts and management overhead.
<b>Implementation</b>	Cost associated with the implementation of the application. These usually include development (customization and integration), testing, training, and consulting.
<b>Communications fees</b>	The inter-computer communication expenses for leased lines, remote access, and allocated WAN expenses.
Indirect Costs	
<b>End user IS</b>	The cost of formal end-user training, casual learning, informal support outside recognized IT support channels, self-development of applications, and local file maintenance.
<b>Downtime</b>	The lost productivity due to planned and unplanned network, system, and application unavailability.

# TCO Calculation - ASP Model

Direct Costs	Year 1	Year 2	Year 3	Total (\$)	% of Total Cost
<b>Hardware</b>					
Servers	\$ -	\$ -	\$ -	\$ -	0.0%
Client computers (10)	\$ 15,000.00	\$ 3,000.00	\$ 3,000.00	\$ 21,000.00	3.9%
Peripherals (5)	\$ 15,000.00	\$ 2,500.00	\$ 2,500.00	\$ 20,000.00	3.7%
Network components	\$ 2,400.00	\$ 1,000.00	\$ 1,000.00	\$ 4,400.00	0.8%
Maintenance fees (20%)	\$ 6,480.00	\$ 7,780.00	\$ 9,080.00	\$ 23,340.00	4.4%
...	\$ -	\$ -	\$ -	\$ -	0.0%
<b>Total Hardware Costs</b>	\$ 38,880.00	\$ 14,280.00	\$ 15,580.00	\$ 68,740.00	12.9%
<b>Software</b>					
License (based on 3 physicians)	\$ 37,500.00	\$ 37,500.00	\$ 37,500.00	\$ 112,500.00	21.1%
Maintenance fees (20%)	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	\$ 22,500.00	4.2%
...	\$ -	\$ -	\$ -	\$ -	0.0%
...	\$ -	\$ -	\$ -	\$ -	0.0%
<b>Total Software Costs</b>	\$ 45,000.00	\$ 45,000.00	\$ 45,000.00	\$ 135,000.00	25.3%
<b>Management</b>					
Network	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 45,000.00	8.4%
Systems	\$ -	\$ -	\$ -	\$ -	0.0%
Storage	\$ -	\$ -	\$ -	\$ -	0.0%
...	\$ -	\$ -	\$ -	\$ -	0.0%
...	\$ -	\$ -	\$ -	\$ -	0.0%
<b>Total Management Costs</b>	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 45,000.00	8.4%
<b>Support</b>					
Support staff (Based on 6 fte's)	\$ 35,360.00	\$ 36,420.00	\$ 37,517.00	\$ 109,297.00	20.5%
Training fees	\$ 2,500.00	\$ 1,000.00	\$ 1,000.00	\$ 4,500.00	0.8%
Procurement procedures	\$ 5,000.00	\$ 1,500.00	\$ 1,500.00	\$ 8,000.00	1.5%
Travel	\$ 1,000.00	\$ 500.00	\$ 500.00	\$ 2,000.00	0.4%
Support contracts	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 30,000.00	5.6%
...	\$ -	\$ -	\$ -	\$ -	0.0%
...	\$ -	\$ -	\$ -	\$ -	0.0%
<b>Total Support Costs</b>	\$ 53,860.00	\$ 49,420.00	\$ 50,517.00	\$ 153,797.00	28.8%
<b>Implementation</b>					
Development/customization/integration	\$ 15,000.00	\$ 5,000.00	\$ 5,000.00	\$ 25,000.00	4.7%
Training	\$ 2,500.00	\$ 1,000.00	\$ 1,000.00	\$ 4,500.00	0.8%
Consulting/system integration	\$ 30,000.00	\$ 18,000.00	\$ 10,000.00	\$ 58,000.00	10.9%
Other (Facilities)	\$ -	\$ -	\$ -	\$ -	0.0%
...	\$ -	\$ -	\$ -	\$ -	0.0%
...	\$ -	\$ -	\$ -	\$ -	0.0%
<b>Total Development Costs</b>	\$ 47,500.00	\$ 24,000.00	\$ 16,000.00	\$ 87,500.00	16.4%
<b>Communication Fees</b>					
Local Area Network	\$ 1,500.00	\$ 1,500.00	\$ 1,500.00	\$ 4,500.00	0.8%
Wide Area Network	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 18,000.00	3.4%
...	\$ -	\$ -	\$ -	\$ -	0.0%
...	\$ -	\$ -	\$ -	\$ -	0.0%
<b>Total Communication Fees</b>	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	\$ 22,500.00	4.2%
<b>Total Direct Costs</b>	\$ 207,740.00	\$ 155,200.00	\$ 149,597.00	\$ 512,537.00	96.0%
<b>Indirect Costs</b>					
<b>End User IS</b>					
Formal end-user training	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 9,000.00	1.7%
Informal end-user training	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 3,600.00	0.7%
Local file maintenance	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 9,000.00	1.7%
...	\$ -	\$ -	\$ -	\$ -	0.0%
...	\$ -	\$ -	\$ -	\$ -	0.0%
<b>Total End User IS costs</b>	\$ 7,200.00	\$ 7,200.00	\$ 7,200.00	\$ 21,600.00	4.0%
<b>Downtime</b>					
Planned downtime (2%)	\$ -	\$ -	\$ -	\$ -	0.0%
Unplanned downtime	\$ -	\$ -	\$ -	\$ -	0.0%
...	\$ -	\$ -	\$ -	\$ -	0.0%
...	\$ -	\$ -	\$ -	\$ -	0.0%
<b>Total Downtime costs</b>	\$ -	\$ -	\$ -	\$ -	0.0%
<b>Total Indirect Costs</b>	\$ 7,200.00	\$ 7,200.00	\$ 7,200.00	\$ 21,600.00	4.0%
<b>Total Costs</b>	\$ 214,940.00	\$ 162,400.00	\$ 156,797.00	\$ 534,137.00	