

# VERSITY

vs.

## Consumer Grade

### TCO





## Calculating Total TCO for Mobility



Maintenance contract

**HARD Costs**

Purchase price

Software

Accessories



IT support overhead

**SOFT Costs**

Productivity loss

Let's take a look at the HARD costs

Three Examples...

# Example 1: No Scanner

## Three Year Hard Costs - No Replacement

HARD COSTS	VERACITY				IPHONE 8			
	YEAR 1	YEAR 2	YEAR 3	TOTAL	YEAR 1	YEAR 2	YEAR 3	TOTAL
Smartphone + battery, charger	1,200 <sup>(1)</sup>	0	0	1,200	810	0	810	1,620
Additional battery	89	0	89	178	140 <sup>(5)</sup>	140	140	420
2 <sup>nd</sup> Shift smartphone	na	na	na	na	na	na	na	na
Application manager (SAM)	3.50	3.50	3.50	10.50	na	na	na	na
EMM \$4/device per month	48	48	48	144	48	48	48	144
Support	317 <sup>(2)</sup>	0	0	317	150 <sup>(3)</sup>	150	150	450
HW failure resulting in replacement	Included	Included	Included	Included	14.84 <sup>(4)</sup>	15.09	15.69	45.62
<b>TOTAL \$</b>	1,657.50	51.50	140.50	<b>1,849.50</b>	1162.84	353.09	353.69	<b>1,869.62</b>

**\$20 Lower**

- (1) Versity 9540 – Wi-Fi only
- (2) 3-year SpectraCare Maintenance
- (3) \$150/year per smartphone
- (4) HW failure resulting in replacement-Warranty not covered – Source VDC TCO Models 2013
- (5) Mophie Juice pack @ 69/per. Need 2x and replace yearly

# Example 2: No Scanner

## Three Year Hard Costs - Replace after Year 2

HARD COSTS	VERSITY				IPHONE 8			
	YEAR 1	YEAR 2	YEAR 3	TOTAL	YEAR 1	YEAR 2	YEAR 3	TOTAL
Smartphone + battery, charger	1,200 <sup>(1)</sup>	0	0	1,200	810	0	810	1,620.00
Additional battery	89	0	89	178.00	140	140	140	420.00
2 <sup>nd</sup> Shift smartphone	na	na	na	0	0	0	0	0
Provisioning tool	3.50	3.50	3.50	10.50	na	na	na	0
EMM \$4/device per month	48	48	48	144	48	48	48	144.00
Support	310 <sup>(2)</sup>	0	0	310	150 <sup>(3)</sup>	150	150	450
HW failure resulting in replacement	Included	Included	Included	Included	14.84 <sup>(4)</sup>	15.09	14.84	45.62
<b>TOTAL \$</b>	1,650.50	51.50	140.50	<b>1,842.50</b>	1,162.84	353.09	1,163.69	<b>2,679.62</b>

- (1) Versity 9540 – Wi-Fi only
- (2) 3-year SpectraCare Maintenance
- (3) Support \$150/year per iphone
- (4) HW failure resulting in replacement-Warranty not covered – Source VDC TCO Models 2013
- (5) Mophie Juice pack @ 69/per. Need 2x and replace yearly

**\$837 LOWER**

# Example 3: With Scanner Three Year Hard Costs - No Replacement

HARD COSTS	VERACITY				IPHONE 8			
	YEAR 1	YEAR 2	YEAR 3	TOTAL	YEAR 1	YEAR 2	YEAR 3	TOTAL
Smartphone + battery, charger	1,700 <sup>(1)</sup>	0	0	1,700	810	0	810	1,620
Additional battery	89	0	0	178.00	0	0	0	0
2 <sup>nd</sup> shift smartphone	na	na	na	0	0	0	0	0
Application manager (SAM)	3.50	3.50	3.50	10.50	0	0	0	0
Barcode scanner	Included	0	0	0	500 <sup>(4)</sup>	0	0	500
Support for Barcode scanner	Included	0	0	0	155 <sup>(5)</sup>	0	0	155
EMM \$4/device per month	48	48	48	144.00	48	48	48	288
Support	410 <sup>(2)</sup>	0	0	410.00	150 <sup>(6)</sup>	150	150	450
HW failure resulting in replacement <sup>(5)</sup>	0	0	0	0	14.84 <sup>(3)</sup>	15.09	15.69	45.62
<b>TOTAL \$</b>	<b>2,250.50</b>	<b>51.50</b>	<b>140.50</b>	<b>2,442.50</b>	<b>2,685.84</b>	<b>551.09</b>	<b>1,361.69</b>	<b>3,058.52</b>

- (1) Versity 9553 – Wi-Fi with scanner
- (2) 3-year SpectraCare Maintenance
- (3) Source VDC TCO Models 2013

- (4) 3<sup>rd</sup> party barcode scanner sled
- (5) Honeywell 3-year support is \$155
- (6) Support \$150/year per iphone

**\$xxx  
LOWER**

# HARD Cost Calculator - Work with your Customers

Ask these questions to enter the amounts specific to your customer

## Hard Costs 3-Year TCO Calculator

We would like to understand better how you do things today. By answering these questions, we can put them into our HARD Cost TCO calculator.

Do you need your mobile device to be available 24x7?

If yes, Do you use a Mophie juice battery pack sled? If so, how much do you pay? Enter \$ for pack.

Do you have to buy two battery packs per phone?

Do you need to replace it every year? If yes, enter the value for years 1,2, and 3

Or do you prefer to have a backup smartphone b/c you are using a scanner sled

If so, how much is your 2<sup>nd</sup> shift phone? Enter \$ for shift phone.

How much is your scanner sled?

If so, is it around \$500?

Do you pay support services for your sled?

If so, is it around \$155/3 years per device?

Do you pay for a provisioning tool?

If so, enter \$.

How much do you pay for an EMM?

If so, do you pay \$4/month per device? Include 2<sup>nd</sup> shift smartphone.

How much do you pay for your device support per year?

Is support \$150/year per device. Remember to calculate deductibles for full replacement or out of warranty.

		CONSUMER				
TOTAL	NOTES	VALUES USED	YEAR 1	YEAR 2	YEAR 3	TOTAL
1,700.00	Veristy w/ scanner	\$810	810.00	0.00	810.00	1,620.00
178.00	Refresh battery year 3	Mophie \$70/per	0.00	140.00	140.00	280.00
0.00	na	\$810	810.00	0.00	0.00	810.00
10.50	SAM 3.50/year/device	\$0	0.00	0.00	0.00	0.00
0.00	na	\$500	500.00	0.00	0.00	500.00
0.00	na	\$155	155.00	0.00	0.00	155.00
144.00	\$4/year/device	\$4	96.00	96.00	96.00	288.00
410.00	3 Year Spectracare	\$150	300.00	300.00	300.00	900.00
0.00	na	VDC Research	14.84	15.09	15.69	45.62
<b>\$2,442.50</b>			<b>\$2,685.84</b>	<b>\$551.09</b>	<b>\$1,361.69</b>	<b>\$4,598.62</b>

[CLICK TO LAUNCH HARD Cost TCO Calculator](#)

Let's take a look at the SOFT costs



# Calculating BASIC SOFT Costs

## SOFT COSTS

---

**Mobile Worker**  
**+**  
**IT Support**

+

Average  
Failure  
Rate

X

Average  
Productivity  
Loss per  
Failure

X

Hourly  
Mobile  
Employee

Average  
Failure  
Rate

X

Average IT  
Support  
Required per  
Downtime

X

Hourly IT  
wage

# Based on Industry Averages for Productivity Loss per Failure

**88 mins**

Average productivity loss per failure

**\$44.50 / hr**

Hourly Mobile Employee FTE

**40 mins**

Average IT support required per downtime

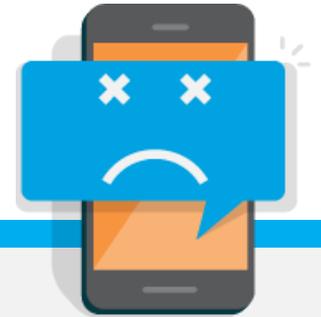
**\$45.60 / hr**

Average IT support required per downtime

# Using Industry Averages for Failure Rates

Average Annual Failure Rate (HW)

	YEAR 1	YEAR 2	YEAR 3
Average Non-Rugged Smartphone	17.3%	17.6%	18.3%
Average Rugged Enterprise Smartphone	7.9%	9.2%	10.1%



**DEVICE FAILURE** is the leading cause of downtime

Non-rugged smartphones are ~2x more likely to fail (breakage)

Source: VDC TCO Soft Cost Model, 2013

# SOFT Cost Calculation - Work with your Customers

Ask these questions to enter the amounts specific to your customer

## SOFT Costs TCO Calculator

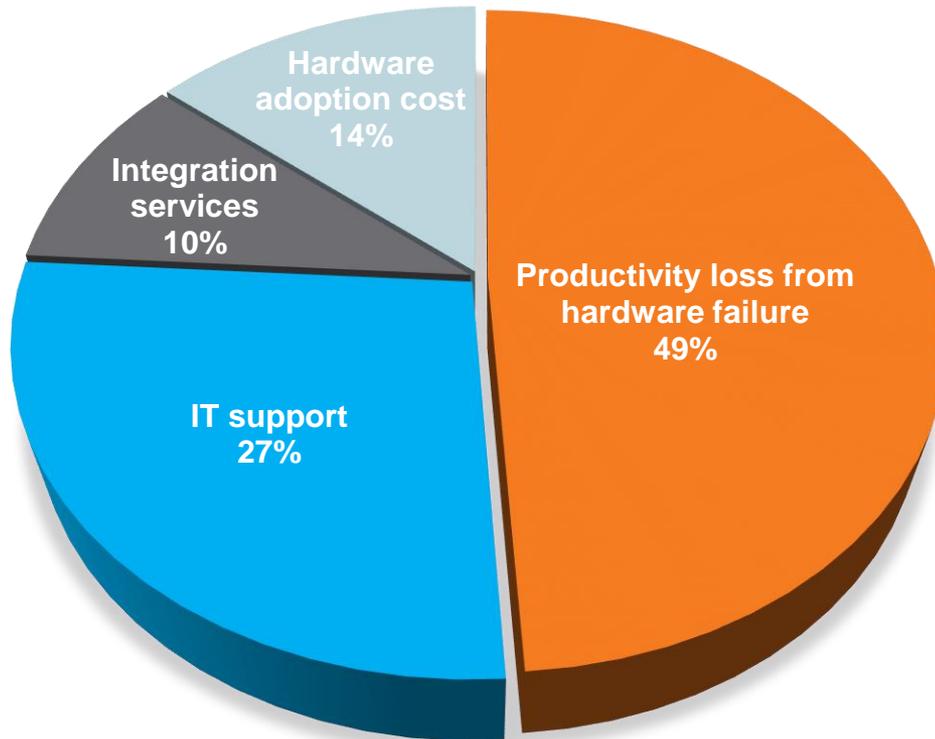
We would like to understand better how you do things today. By answering these questions, we can put them into our SOFT Costs TCO calculator.

- 1 How many devices do you have deployed or plan to deploy?
- 2 Can you tell us if you track your failures in an asset management application? Enter value by week
- 3 How many devices do you RMA per week?
- 4 How many help desk calls do you receive per week?
- 5 What is your backup strategy? Do you keep spares? If so, how many do you keep? Who manages those spares?
- 6 How many mobile workers do you support?

	Minutes	Hourly	Per Week	Per Month	Per Year
SO/yr	30	\$45.60	\$2,280.00	\$9,120.00	\$109,440.00
SO/yr	30	\$45.60	\$228.00	\$912.00	\$10,944.00
W/yr	30	\$33.00	\$330.00	\$1,320.00	\$15,840.00
W/yr	10	\$33.00	\$1,100.00	\$4,400.00	\$52,800.00
			\$3,938.00	\$15,752.00	\$189,024.00
per	58	\$44.50	\$43,016.67	\$172,066.67	\$2,064,800.00
			\$48,054.67	\$192,218.67	\$2,306,624.00

[CLICK TO LAUNCH  
SOFT COST TCO  
CALCULATOR](#)

# Industry Averages Site Productivity Loss is 49% of Total TCO



## Downtime remains a critical issue

Mobile devices supporting more mission-critical applications

---

Impact to customer service, internal productivity, employee morale

Source: VDC TCO Soft Cost Model, 2008

# Considerations Beyond TCO

## USER PRODUCTIVITY

- Audio acoustics – sound pressure levels
- Screen size and resolution levels – impact on productivity and battery efficiency
- Screen resiliency to environmental elements – moisture, dust
- Battery and power management options

## DEVICE RELIABILITY

- Wi-Fi performance
- Sled solutions – switch and contact ratings, battery architecture
- Temperature for operating and storage
- Chemical resistance

## IT CONTROL

- Users vs IT controlled OS updates
- Device launcher flexibility
- Device remote control
- File management
- Device roadmap visibility
- Logistics overhead – distribution certificate updates
- Maintaining enterprise security and privacy
- EMM integration
- Removal of unwanted services
- Remote reboot
- Enabling enterprise API access
- EMM ability to lock configuration profiles

# References

# 3<sup>rd</sup> Party Sled and Battery Pack

Honeywell Captuvo Enterprise Sled for Apple iPhone 6 – \$682.99

- Honeywell Limited comprehensive Service – extended \$155.99 for 3 years

Mophie Juice Pack for iPhone 6 – \$69.99



MOPHIE JUICE PACK



HONEYWELL CAPTUVO SLED

## ... More SOFT Costs

<https://thenextweb.com/apple/2018/07/14/report-apples-iphone-6-has-the-highest-failure-rate-among-iphones-but-samsung-is-worse/>

### Additional soft costs to be considered

- Chemical resistance
- OS churn – less than a year
- 3<sup>rd</sup> party accessories support for iphone models
- 2<sup>nd</sup> shift phones add to deployment and management overhead
- Security risks
- Employee satisfaction