

Avoiding The Seven Deadly Sins of Disaster Recovery

Applying the Lessons of Theology to Information Technology

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“The Seven Deadly Sins are those transgressions which are fatal to spiritual progress. You probably commit some of them every day without thinking about the rich tradition of eternal damnation in which you are participating.” – 7DeadlySins.com¹

Are you guilty of committing one or more of the Seven Deadly Sins of Disaster Recovery? Is your organization a victim of these common pitfalls whether through omission or the more sinister act of commission? Do you wonder if your firm is heading toward the celestial plane or on the road to perdition? Do not despair! Unlike those entering Dante’s Inferno, you need not abandon all hope as you enter the data center door. Rather, take comfort in knowing that even after decades of sinful neglect, disaster recovery (DR) redemption is only a few mouse-clicks away.²

SOME HISTORY

Anyone familiar with Western culture has heard of the Seven Deadly Sins – so called because committing any one puts your soul at risk of eternal damnation. Hollywood has contributed to our awareness of the Sins by using them as a plot device in several serial-killer movies. Many people can name some of them, such as *pride*, *greed* and *gluttony*, but very few can name all seven.

Precursors to the modern day list of Sins first appeared more than sixteen hundred years ago in the writings of Greek philosophers and Middle Eastern theologians. The 4th century religious writer Evagrius of Pontus codified the subject by assembling the first list of eight “wicked human passions.”³

Between the 4th and the 13th century it was commonly held that some practices were more sinful than others. This belief led to a severity ranking system of the Eight Wicked Human Passions as shown in Table 1. Notice that the Eight Wicked Human Passions end with the worst sin of all, *pride* - the sin that led to Lucifer’s fall.

Two hundred years after they first appeared, Pope Gregory the Great (590 to 604), updated the list by folding *vainglory* into *pride*, *aecdia* into *sadness*, and added *envy*, leaving us with the first listing of Seven Evil Practices. In the 13th century, St Thomas Aquinas dismissed the idea that one sin was worse than another, and warned of the dangers of all seven.

In the 17th century, a thousand years after Pope Gregory’s promulgation of the list, the Roman Catholic Church replaced the terms *sadness* and *avarice* with the more familiar ones – *sloth* and *greed* leaving us with the currently accepted list of Seven Deadly Sins.

¹ Our thanks to *7DeadlySins.com* for some of the historical and background information used in this article.

² Note: The procedures outlined in this document not *officially* endorsed by the College of Cardinals of the Roman Catholic Church.

³ From *Sacred Origins of Profound Things*, by Charles Panati, Penguin Books USA Inc, copyright 1996.

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Table 1: The Eight Wicked Human Passions and Seven Deadly Sins

<u>Original Eight Wicked Sins</u>	<u>Revised Seven Deadly Sins</u>	<u>Explanations</u>
1. Gluttony	1. Gluttony	Excess in eating or drinking.
2. Lust	2. Lust	Intense or unrestrained craving, especially sexual.
3. Avarice		Covetousness; excessive desire especially for wealth.
4. Sadness		Plagued by feelings of unhappiness.
	3. Greed	Excessive or rapacious desire especially for wealth
	4. Sloth	habitual disinclination to exertion; indolence; laziness
5. Anger	5. Anger	A strong feeling of displeasure or hostility
6. Acedia		A state of mental inactivity and apathy; ennui
	6. Envy	Jealousy.
7. Vainglory		Boastful, unwarranted pride in one's accomplishments
8. Pride	7. Pride	Excessive pleasure or satisfaction in an achievement

MAN'S FLAWED CHARACTER

The prevailing viewpoint among western religions is that Man's character is morally weak. This perspective holds that left alone, the average person will quickly fall victim to temptations they encounter in everyday life. Even the celebrated victories of Daniel Webster and Charlie Daniels,⁴ give no solace to those who fear for their immortal soul. Given this mindset, we wonder, "Is there hope for salvation?"

Fortunately, the answer is "yes", but the solution must wait. First, we must perfect our understanding of the relationship between CT (Christian Theology) and DRT (Disaster Recovery Theory).

PARALLELS

The disaster recovery demons threatening today's businesses bear little similarity to the diabolical tempters faced by our ancestors; yet despite these differences there are many parallels between CT and DRT.

Today's companies and government agencies constantly confront a barrage of cyber-plagues in the form of "worms," "trojans," and "viruses." These modern-day scourges are just as destructive to data fields as the traditional plagues of locust, lice and frogs were to the wheat fields of biblical times. Add to these threats the dangers posed by severe weather, epidemics, criminal action, labor strikes, and terrorism, and it is clear that every aspect of our lives face constant risk of disruption.

Several other important parallels between CT and DRT are worth noting.

⁴ Refers to the story [The Devil and Daniel Webster](#) by Stephen Vincent Benet and the song "[The Devil Went Down To Georgia](#)", released by the Charlie Daniels Band, both virtuous warriors for good!

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The Stain of Sin

Many Christian sects believe that humans are flawed creatures born with the stain of original sin on their souls. CT holds that only through the removal of this blemish may one gain entry to the heavenly kingdom. Information Technology specialists know that key computer technologies including operating systems, databases, and various business applications, are also flawed creations. Fortunately, legions of software engineers are working assiduously to exorcise errant code and remove the mark of unreliability from the souls of these products.

Demons and Daemons

Millions of people go through their day believing that they are surrounded by temptations and are the target of demons seeking to lure them into sinful acts. To these believers salvation is only gained from “a life well lived.” Similarly, DR professionals know that virtuous computing is the result of proper planning and righteous computer practices. These professionals rely on their IT colleagues to battle with poorly designed data protection policies and errand daemon processes that can spread uncontrollably through critical systems.

The Soul of Business

In CT, the soul is the essence of existence and survives after death. For many DRT practitioners, data is the soul of their organization and its protection is essential to survival after a disaster such as a computer system crash. However, just as with souls, constant IT diligence is required! With annual data growth rates approaching 100%,⁵ every DR plan is at risk of falling into sinful obsolescence. Some institutions have specialized teams whose mission is to be the “guardian angel” of the organization’s information soul. These professionals take their charter seriously and alliteratively seek storage salvation through the practice of proper protection policies.

Coping with Temptations

Many who believe that temptation lurks around every corner spend their day hoping to avoid sinful behaviors such as drinking, cavorting with the opposite sex and games of Texas Hold’em. Many of those involved in IT disaster planning share a similar perspective and urge users to avoid unprotected web-surfing, online flirting, and connecting to Internet casinos to engage in games of Texas Hold’em.

THE SEVEN DEADLY SINS OF DISASTER RECOVERY

Table 2 shows the relationship between the traditional Seven Deadly Sins and our 21st Century Disaster Recovery Sins. Quickly examine this listing. Is your firm guilty of any of these nefarious deeds?

⁵ Disaster Recovery Planning: Preparing for the Unthinkable, 3rd edition, by Jon William Toigo, Prentice Hall PTR, copyright 2003.

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Table 2: The Seven Deadly Sins of Disaster Recovery

<u>The 7 Sins</u>	<u>The DR Sins</u>	<u>Explanation</u>
1. Gluttony	Wasteful Policies	This Sin covers everything from poorly designed network backup policies to wasteful spending.
2. Lust	Enamored with Technology	An unhealthy and unsafe focus on technology at the expense of a balanced DR plan
3. Greed	Limited DR Spending	Under-funding and under-staffing of the Disaster Recovery plan
4. Sloth	No DR Testing or Training	The organization is too lazy to consistently run DR training nor testing sessions
5. Anger	Loss of Temper over Slow Change	Frustration and anger when calls for change or reform are slow to occur. Ex: 911 Commission
6. Envy	Jealousy of Others Power and Control	An unwillingness to share resources across the enterprise
7. Pride	Complete Lack of a DR Plan	A prideful belief that “It can’t happen here.” This is the <i>most</i> dangerous sin!

Pious people will tell you that the path to salvation requires you to daily confront the temptations posed by sins. Righteous DR professionals will say the same about the Seven Sins of Disaster Recovery. Now that you are aware of them, you must take the next step – virtuous actions!

Fortunately, there is an antidote to mankind’s sinful inclinations. Known as the Seven Heavenly Virtues these actions are designed to counter the dangers of each of the Sins. Through the zealous performance of these good works average men and women can overcome their evil predispositions and attain salvation.

From a DR perspective, can we learn anything about dealing with the Seven Deadly Sins of Disaster Recovery by being familiar with the Seven Heavenly Virtues?

THE HEAVENLY VIRTUES

The earliest references to the Heavenly Virtues appears in the epic poem “Psychomachia” (Battle for the Soul – 410 A.D.), by Aurelius Clemens Prudentius (348–413). In it, Prudentius prescribes seven virtuous acts whose regular practices will strengthen resolve against sinful action. Scholars credit this selection of seven virtues with influencing the eventual consolidation of the Eight Wicked Human Passions into the Seven Deadly Sins.

Review the list of Seven Heavenly Virtues shown in Table 3. Use it as a source of inspiration. Be creative and re-interpret these virtues in light of your new-found understanding of the dangers of DR sinfulness. Are you inspired to reinvigorate your backup policies? Will you implement the use of redundant networks, geographical dispersion of assets, and online archiving? Will you finally take actions that will lead the way to DR salvation?

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Table 3: The Seven Heavenly Virtues Explained

<u>The 7 Sins</u>	<u>The 7 Virtues</u>	<u>Explanation</u>
1. Gluttony	Abstinence	Refrain from indulging
2. Lust	Chastity	The condition of being pure
3. Greed	Liberality	Generosity
4. Sloth	Diligence	Persistent application to an undertaking
5. Anger	Patience	Forbearance
6. Envy	Kindness	The quality of being considerate and humane
7. Pride	Humility	A lack of false pride

THE ULTIMATE TEST

An actual crisis is the ultimate test of any Disaster Recover plan. It also stresses the moral and spiritual fiber of those involved and can trigger unexpected changes in behavior. DR teams are particularly vulnerable to despair as they struggle to meet RTO⁶ and RPO⁷ goals. Normally placid technologists have outbreaks of anger. Feelings of guilt and inadequacy spread to members of the recovery team as they helplessly watch their carefully scripted procedures fail. Unpredictability reins as chaos cascades through the organization. Backup tapes are missing, unavailable, mislabeled, or unreadable. Shadowed databases are out of synchronization and an unknown number of transactions have disappeared into the ether. As the pressure to “get back online” intensifies, subtle incompatibilities between the technologies located at failover work sites become apparent and vendor promises of “plug and play” are replaced by the reality of “plug and pray.”

It is at times like these, when the dream of a quick recovery fades and is replaced by the nightmare that a laborious, time-consuming, and inaccurate restoration process lies ahead.

THE FIVE-STEPS TO ABSOLUTION

Knowing what to do is not enough to bring about salvation – action is required! Borrowing from the traditional format of Twelve-Step Programs⁸ we have devised a Five-Step Program that will lead disaster recovery planners who have lost their way back to the proper path. The five steps are:

1. Identify the Offending Behavior
2. Acknowledge the Mistake
3. Stop Doing It
4. Take Corrective Action
5. Spread the Word

⁶ RTO - Recovery Time Objective. According to the Disaster Recovery Institute International (DRII), the maximum time that a process can be out of operation before a disaster occurs.

⁷ RPO - Recovery Point Objective is the maximum amount of information (data) that can be lost before triggering a disaster (source DRII).

⁸ Stacy Anderson’s website is an excellent resource for anyone interested in learning more about the various Twelve-Step Programs - http://www.stanice.com/12step_toc.html.

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By reading this article, you have already taken the first step on the path to DR Redemption. You are now armed with the facts! Reach out to your fellow DR team members and with missionary zeal, preach to them about the dangers of the Seven Deadly Sins of Disaster Recovery. But even this is not enough. Stamping out bad DR behavior at your institution is only the first step. As a convert to the practice of Virtuous DR planning you are called on to spread the word and proselytize to the masses. The responsibility is yours – share this document widely and openly. Become an evangelist by spreading the “good news” everywhere.

Now go forth, and sin no more!

ABOUT THE AUTHOR

The beneficiary of sixteen years of Catholic education, Don Byrne was born and raised in New York City, but since 1980 has lived in New Hampshire. He holds undergraduate degrees in Mathematics and Philosophy, a Masters degree in International Marketing, and is completing his PhD in Organizational Behavior. He has been the CEO of a number of highly successful computer firms and is a Managing Director of North River Solutions, Inc.