

# Predicting Downtime – Before it Happens

"If you don't know where you are going, any road will get you there."  
~ Lewis Carroll

Pass to Go without needing a "Get out of a jail free" card

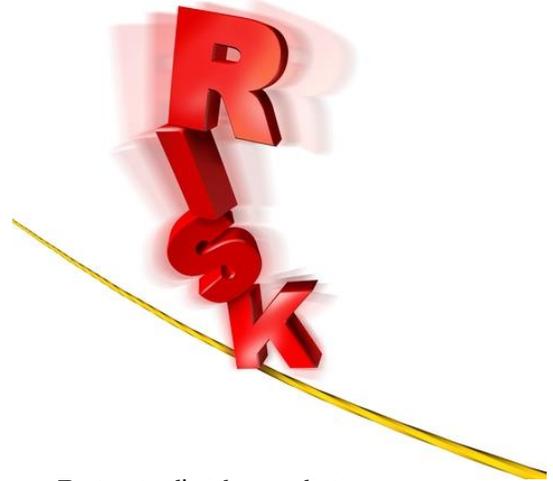
Downtime still exists. For some enterprises, it's a too familiar, costly, embarrassment for IT staff and management. For others, downtime is rare, but still it's an event that is managed with care.

### What you don't know can hurt

For many enterprises, IT changes regularly lead to outages and unwelcomed downtime. In the aftermath, it's easy to find ways the problem could have been avoided, steps that were overlooked, and adverse consequences that no one should have experienced.

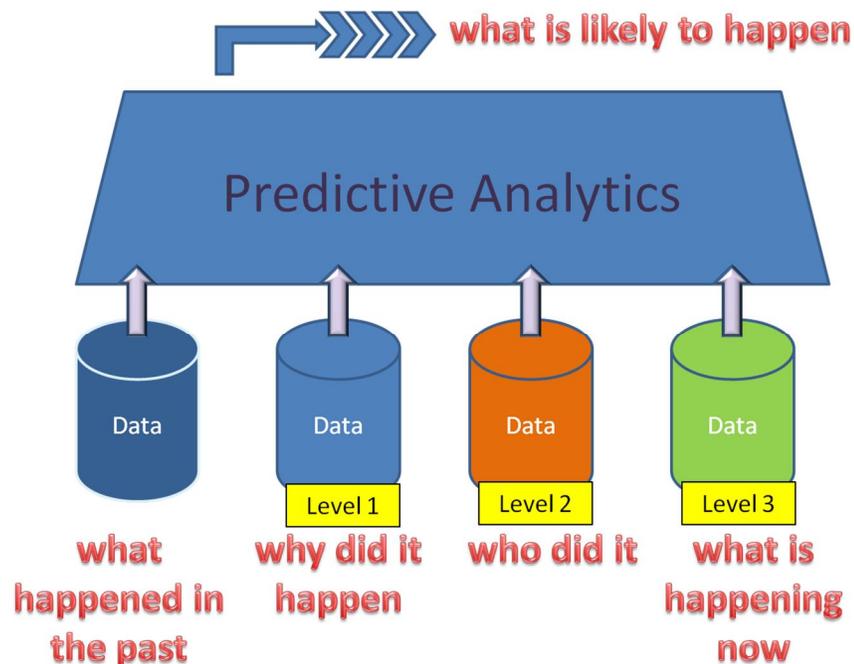
Today, prediction technology is used to avoid these negative consequences, before they occur. Predictive analytics begin with simple descriptive analytics, relating future outcomes based on past occurrences. But true prediction comes with added correlations based on the interdependencies of system elements, the business environment, and who is involved in the change.

The perfect storm often exists where a planned change has an unacceptable risk of failure but no one knows it. We walk blindly into traps, week after week, change after change.



Patented' risk prediction technology from Netwatch Solutions lets enterprises quantify and mitigate unacceptable risks before making IT changes.

Let us show you how.



[www.netwatchsolutions.com](http://www.netwatchsolutions.com)

# Predictive Analytics – for customer success

Maturing IT enterprises have the basics for prediction – the data exists in many of the IT Service Management tools.

## What do you need for prediction?

Effective change risk prediction begins with configuration-based change management. That is, when proposing IT changes (RFCs), those change records should be tied to the device that is being changed.

Next, configuration and application dependency mapping is needed to define the relationships between what is being changed, to whom and what else can be affected.

Changes need to be correlated against the macro-environment, the time of day, the time of the month, and based on other important business relationships.

Last, but certainly not least, information on the Change Agent is vital to knowing the likelihood of success.

**Change Prediction Set-up**

5 Number of relationships away from the changed asset to analyze during prediction

**Prediction Considerations**

Predict consequences based primarily on:

- The skill, competence, and expertise of the implementer
- The complexity of the change

Your organization primarily agrees that behaviors of the CIO / IT Leader and the entire organization can influence the success of this change

The likelihood of the implementer's success on the next change is related to:

- Implementer's overall change rating of success
- Most recent 90-day success rating of the implementer on all changes
- Implementer's overall success rating on this type of asset
- Implementer's overall success rating on this particular asset

Include factors for:

- Implementer's behavior on this change
- Implementer's sex, personality and attitude

Consider whether the implementer:

- Is male or female
- Defined the implementation steps
- Identified who may be affected by the change

Our prediction algorithms are rounded-out with socially derived inputs, data based on past change outcomes, and information on who was affected on past changes.

As you use the Netwatch system, data on past failures improves future predictions. In essence, you rely on past mistakes to increase future successes.

Let us show you how.

**Change Analysis**

**Change Record Information**

ID: C-12-9215-NC      NetworkDevice: oid-dev-vip  
 Implementer: Ken Langston      Proposed Date: 10/22/2014

**Results**   Affected Assets   Affected Clients   Affected Documents

Analysis Performed: 9/17/2014

Levels Deep

Risk of Failure: <b>25 %</b>	This is within your typical risk of failure
<b>Warning</b>	This asset exhibited unplanned downtime within the last 90 days.
<b>Warning</b>	This implementer has never changed this asset.
97.76 %	Organization change rating
92.82 %	Long-term success rate of change implementer - Ken Langston
98.45 %	90-day success rate of change implementer - Ken Langston

"I no longer feel comfortable planning IT changes without first predicting the impact. We wouldn't have it any other way."

