

# Cumulative Software Failures To Erp Systems

**Siddarth Kaul**

EMAIL: - siddarthkaul7@gmail.com

M.Tech (Software Engineering), Singhania University Rajasthan India

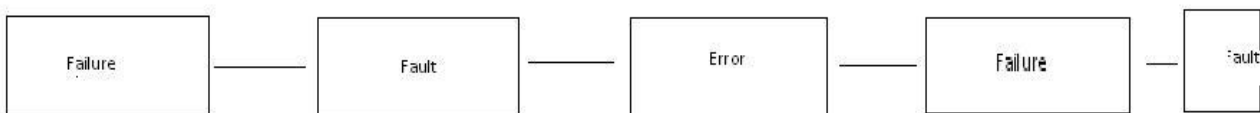
LINK AVAILABLE AT: - academia.edu

## DEFINITION

Software failures usually can be defined as a delivery service mechanism failure when a system usually does not agree for expected service or function as desired. According to Laprie it can be said as failures to systems usually occur when delivered service no longer compiles with the specifications, the definition is applicable to both hardware & software system failures

.Faults and bugs in hardware or a software component causes error. Errors or bugs can be multiple which lead to software failures at distinct levels depending upon the cyclic behavior of the fault.

Failure or fault behavior diagram



## CLASSIFICATIONS

Software failures can be both permanent & transient depending upon the nature on which the fault has taken place . Normally this can be classified as:-

Bohr Bugs

Hiaasen bugs

Bohr Bugs: - Faults being permanent & transient in nature are classified as Bohr Bugs and are removed during the process of testing & debugging.

Hiaasen Bugs :- Faults which belong to a class or a group of temporary internal faults which usually are intermittent are lead to large proposition of software failures if system does not have proper permanent

boundaries with system restart options .Otherwise these errors are transient in nature which are caused by **pheno's such as overload or exception** error .Most of these failures are caused by race condition & timing problems.

## DESCRIPTIVE CASE STUDIES FOR SOFTWARE FAILURES WITH CAUSES

Confusion in specification to user and designers due to lack of communication resulting in wrong E-R design.

Complex Behavior of software with programming errors

Frequent changes suggested in by client to developer leading to time shortage and supply & delivery demand.

Poor project Management & design Analysis.

Lack of resources, human Manpower & cost of project design & product.

F. Lack of training & guidance to use software

## CASE STUDIES

### **UK government scraps the £12 billion National program for IT in the NHS**

In September, U.K. officials [pulled the plug](#) on what is considered to be the largest public IT project of all time, an attempt to provide electronic health records for all of the country's citizens.

The sprawling effort was begun in 2002 but failed to produce a workable system, despite massive spending outlays that have [been estimated](#) at about £12 billion (US\$18.7 billion).

The U.K.'s Major Projects Authority [concluded](#) the project was "not fit to provide the modern IT services that the NHS needs."

"The higher they fly the farther they fall," said Michael Krigsman, CEO of the consulting firm Asuret, which helps companies run successful IT projects. "They tried to impose a centralized solution onto just an enormous geographic and political base. It was a massive undertaking filled with political differences and technical failures, and in the end it serves as an example of what not to do."

### **New York City's CityTime project**

Fallout continued this year over New York's massive CityTime payroll system project, which has been wracked by cost overruns and a criminal probe into an alleged kickback scheme involving former employees of systems integrator SAIC and a subcontractor, TechnoDyne.

CityTime originally had a \$63 million budget, but costs since skyrocketed astonishingly, with [total estimates](#) reportedly reaching \$760 million.

In June, [officials indicted](#) TechnoDyne executives Reddy and Padma Allen. Others, including a number of former SAIC employees, have also been charged.

New York officials are seeking to recover money paid to SAIC. Earlier this month, SAIC said it had set aside a \$232 million loss provision in connection with the case.

## **SAP project woes impact Ingram Micro's profits -- twice**

In April, massive technology distributor Ingram Micro announced that problems with an SAP project in Australia had made a significant dent in its first-quarter profits.

Net income stood at \$56.3 million, a drop from \$70.3 million in the same quarter the previous year, Ingram Micro said at the time. The shortfall was "primarily attributable to difficulties transitioning to a new enterprise system in Australia," it said.

Ingram Micro went on to stress that the system would provide a great deal of value and efficiency once in place. However, it also warned that its financial results may yet again be impacted by the project's issues, a premonition that [proved true](#).

In the second quarter, net income stood at \$59.7 million, down from \$67.7 million in the same period last year, Ingram Micro reported in July. However, the SAP project's issues had been largely resolved, it said.

## **Montclair State University sues Oracle over a PeopleSoft project, but Oracle returns fire**

In May, Montclair State University in New Jersey filed suit against Oracle, claiming the vendor had completely botched a PeopleSoft project that was supposed to replace the school's aging legacy systems. Because of Oracle's alleged misdeeds, it might cost up to \$20 million to finish the project, Montclair has claimed.

But Oracle quickly fired back, claiming that the problems were the [school's fault](#).

"When issues arose during the course of the project, it became clear that MSU's leadership did not adequately understand the technology and the steps necessary to complete the project," Oracle said in a court filing. "Instead of cooperating with Oracle and resolving issues through discussions and collaboration, MSU's project leadership, motivated by their own agenda and fearful of being blamed for delays, escalated manageable differences into major disputes."

Montclair recently filed an [amended complaint](#) that adds a wealth of detail to its claims, including an allegation that Oracle ran a "rigged" software demo during the sales process and was also guilty of extortion.

Oracle hasn't commented on Montclair's latest claims.

## **Epicor sued by customer over ERP project that turned into a 'big mess'**

Some ERP failures are bigger than others with respect to scope and cost, but they all can have a serious impact on a company's operations.

Commercial outdoor furniture seller ParknPool [took Epicor to court](#) in late November over a "big mess" of an ERP project that it says will result in it taking a loss this year.

ParknPool was looking to move up from its QuickBooks system, which it was outgrowing, Jim Fonner, administrative manager of the Lexington, Virginia, company, told IDG News Service in a previous interview.

It chose Epicor over a Sage system because Epicor's product seemed more tightly integrated, Fonner said. But nothing seemed to go right once the contract was signed, according to ParknPool, which has about 20 employees.

"Epicor said they could do it in seven weeks. We gave them seven months, and we got zero," he said in the interview. "I couldn't even look at a profit-and-loss statement. We couldn't process orders. We were saying, 'QuickBooks is so much better than this' and we were paying \$3,500 a year for it."

In a previous statement, Epicor denied wrongdoing: "Our products, consulting personnel and partner performed well, all of which Epicor believes will be borne out as we defend our position in any proceedings."

### **Marin County accuses SAP, Deloitte Consulting of a racketeering scheme**

In February, the government of Marin County, California, sued Deloitte Consulting and SAP in federal court, [claiming](#) they had "engaged in a pattern of racketeering activity" aiming at bilking the county out of more than \$20 million in connection with a failed ERP project.

Marin County had originally sued Deloitte in a lower court last year, claiming that the systems integrator had dumped inexperienced workers on the project, which led to the problems. The county has decided to rip out the SAP software and replace it with something else, in the belief that doing so would be a lower-cost option to finishing the job.

Its suit alleges that SAP and Deloitte are in violation of the federal Racketeer Influenced and Corrupt Organizations act (RICO). Under the statute, the county's desired \$35 million in damages would be tripled.

Marin County [later said](#) that SAP enticed it into joining a "Ramp-Up" early adopter program for the software suite, a move it claims ended up contributing to the project's failure since the software was new and risky.

SAP and Deloitte have both denied any culpability. Deloitte has called Marin County's federal suit a "frivolous" tactic and an attempt to get a more favorable legal forum for its claims, while SAP has questioned why it would want to collude with Deloitte on a project that was doomed to fail, among other defenses.

The lawsuit has yet to go to trial. A case management conference is set for Jan. 27.

### **Epicor customer sues after allegedly wild cost overruns**

It's common, and the cynical might say expected, for ERP projects to end up costing more than originally expected. But five times as much? That's the claim of Whaley Foodservice Repairs of South Carolina, which [sued Epicor in August](#).

Whaley, which sells and fixes equipment used by commercial kitchens, first started talking to Epicor about an ERP project in 2006. The system was supposed to be implemented and live in Whaley's home office as well as a dozen branches by March 2007, but that goal was never met and the software has never worked as it was supposed to, according to Whaley's lawsuit.

The project's implementation topped \$1 million, or more than five times the original estimate of \$190,000, according to the suit. Epicor has denied wrongdoing, and says that under the terms of the companies' agreement, Whaley still owes it more than \$283,000.

### **Auditors: ERP software woes could cost Idaho millions**

In March, an Idaho state auditor [released a report](#) that found that problems with a new system developed by Unisys for processing Medicaid claims could end up leading to the loss of millions of dollars.

The system is supposed to handle claims from health care organizations that treat patients who receive Medicaid. But design defects and other issues led to many payment delays and faulty processing of claims, according to the auditor. The state ended up sending more than \$100 million in advance payments to providers while figuring out the problems.

It since began attempting to get that money back, but some \$2 million was "at risk of not being recouped at all," the report said.

The auditor's report also pinpointed a potential root cause for the problems, noting that the system went live before certain testing milestones had been reached.

### **Lawson, CareSource Management head to court**

Health care plan administrator CareSource Management Group [sued Lawson Software](#) in September, claiming that an ERP system from the company hadn't been able to get beyond the testing phase and wasn't the fully integrated suite Lawson promised.

The system instead was two modules, including the then-new Lawson Talent Management, according to the organization's suit. CareSource was in fact one of the first companies to install the new application, it added.

As the project went on, severe data-transfer issues between the talent management module and a financial application occurred, to the degree that at one point CareSource had 20 open tech-support cases with Lawson, it states. CareSource is demanding at least \$1.5 million in damages.

In response, Lawson acknowledged that "certain issues" occurred with the modules' integration, but they were resolved. In addition, while the project did remain in a testing phase, CareSource "halted" it before filing the lawsuit, according to Lawson, which is seeking more than \$335,000 in unpaid fees.

### **SAP-IBM payroll system woes fouled up nurses' pay**

Nurses in Nova Scotia reportedly suffered through at least six months of faulty paychecks this year due to problems with an SAP system project led by IBM.

After the Victorian Order of Nurses flipped the switch on the SAP system in January, some nurses got shortchanged while others got double their expected pay, said Janet Hazelton, president of the Nova Scotia Nurses Union, in a [July interview](#).

"My concern is with the nurses that got \$100 more," Hazelton said. "They may not have noticed it. Our pay is never the same."

SAP's payroll software is solid technology, but tricky to implement given all the variables with worker pay, as well as the job of mapping over details from the legacy system, [consultant](#) Jarret Pazahanick previously told IDG News Service.

Most problematic SAP payroll project failures have the same characteristics, according to Pazahanick: "The common thread is junior consultants and weak testing."

Despite the above roll-call of ERP horrors, there's reason to be hopeful, said consultant Krigsman.

While the number of high-profile failures was about the same this year as last, Krigsman thinks the industry "is waking up to the fact that customers find this situation abhorrent and unacceptable." And many of the major vendors are taking steps to address the problem.

But, "ERP vendors are only one step in a broader ecosystem that includes the customers and the system integrators," Kringsman said. "Ultimately solving the problem requires coordination among these three groups, but certainly the ERP vendors should take strong leadership."

## BIBLOGRAPHY (refrences)

Software Failures by Stephen flowers edition 1996 ,

[www.cio.com/](http://www.cio.com/) ERP failures in -2011

Software engineering –A petitioners approach by Roger pressman

4. *srel.ee.duke.edu/sw\_ft/node3.html* - *en.wikipedia.org/wiki/List\_of\_software\_bugs*