

Archibald & Prado Research 2008 Results

MATURITY AND SUCCESS IN I.T. Summary Report

Organized by Darci Prado and Jose C. Tinoco

March 15th, 2009

We present the **Final Report – Summarized Version** of the 2008 Archibald & Prado research results on **Maturity and Success in IT**. The complete report contains all data and broad results analysis.

This survey was available for free at www.maturityresearch.com from January to March of 2009; professionals surveyed represent **41** organizations that deal with IT and that participated in the first stage of the survey, which took place during the last months of 2008.

Considering the complexity of the subject, this research, as 2006's version, remains as an **exploratory study** which aims to establish the foundation for other studies.

The objectives of this work are:

- Verify the project success level of Brazilian organizations and compare it with Standish Group's Chaos Report (www.standishgroup.com/chaos).
- Determine if there is a correlation between success, maturity, and additional factors (context)
- Identify the main failure causes in each maturity level.

Finally, it is important to remember that this stage of the survey follows the same confidentiality and statistical analysis standards used on the previous stage.

It is important to clarify what is being studied

The research aims to evaluate maturity and success of projects within the Information Systems category, as defined by Russell Archibald (please refer to www.maturityresearch.com for additional information on Archibald's Categories).

Participants of this research are divisions (or departments) of organizations which work developing or implementing information systems (software), i.e., divisions/departments that chose Information Systems (software) on the first stage of this survey. Thus, these departments are involved with one or more of the activities shown below:

- Application development
- Installation of software packages developed by external suppliers
- Installation of software packages for clients
- Large maintenance of existing applications

Note: Projects of hardware equipment development are considered as new product development (NPD) projects and are not included in this report.

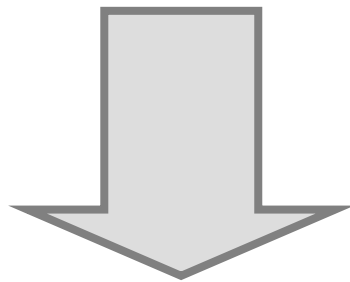
- 2008 Maturity & Success in IT survey
 - Maturity results
 - What is success?
 - Results for success
 - Comparison of results: Brazil vs. Chaos Report
 - Maturity and success
 - Comparison with 2006 results
- Failure causes
- Participants
- Thanks

2008 SURVEY RESULTS

FIRST STAGE (Sep - Dec 2008)

AVERAGE MATURITY: **2.65**

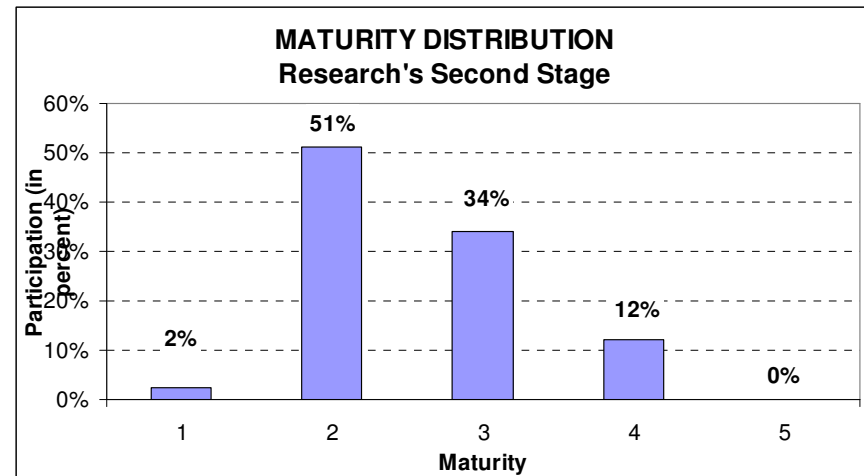
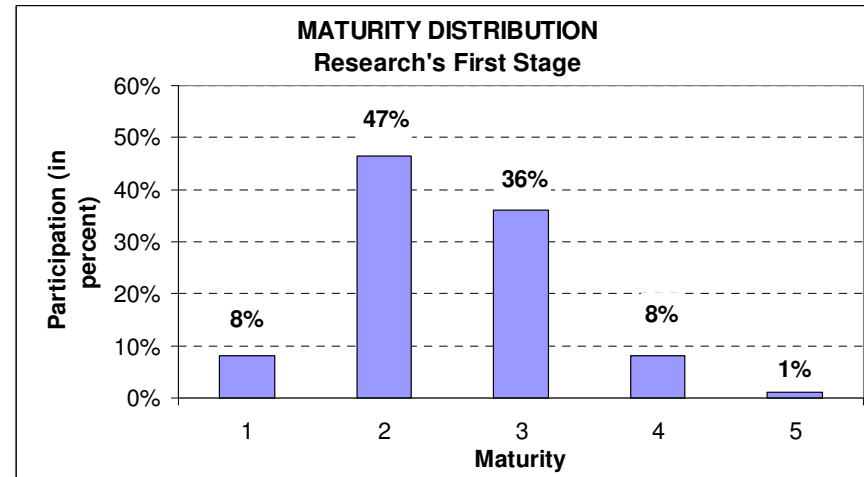
(86 participants)



SECOND STAGE (Jan - Mar 2009)

AVERAGE MATURITY: **2.69**

(41 participants)



Participants of the second stage originated from the survey's first stage.

Population distribution on the second stage is very similar to the distribution in the first stage.

More information about the first stage can be obtained in the complete report.

Second stage of the research: Measurement of success

The second stage of the research aimed to correlate maturity and success. Because of that, a definition of **success** is needed and, reviewing PM literature, the following definition can be found as widely spread (IT environment) :

A **successful IT project** is a project to which the following criteria can be applied:

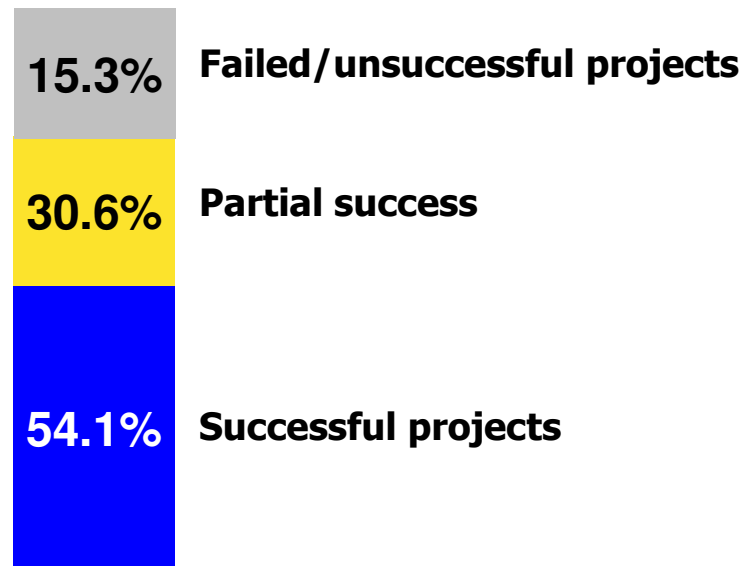
- Satisfied the customer/user;
- Positively helped to achieve the business goal;
- Executed the scope exactly as predicted and the software is being used as planned;
- Fulfills the technical specifications of quality and performance;
- Fulfills the schedule and cost restrictions.

This is a rigorous, academic definition. Unfortunately, it creates a serious problem when applied to real-world situations: very few IT projects would be rated as successful and all remaining ones would be failures. Thus, we opted for another view on this issue, based on the Standish Group definitions, that uses the concepts below (they are outlined in the next page):

- * Successful project (success)
- * Partially successful project
- * Failed project

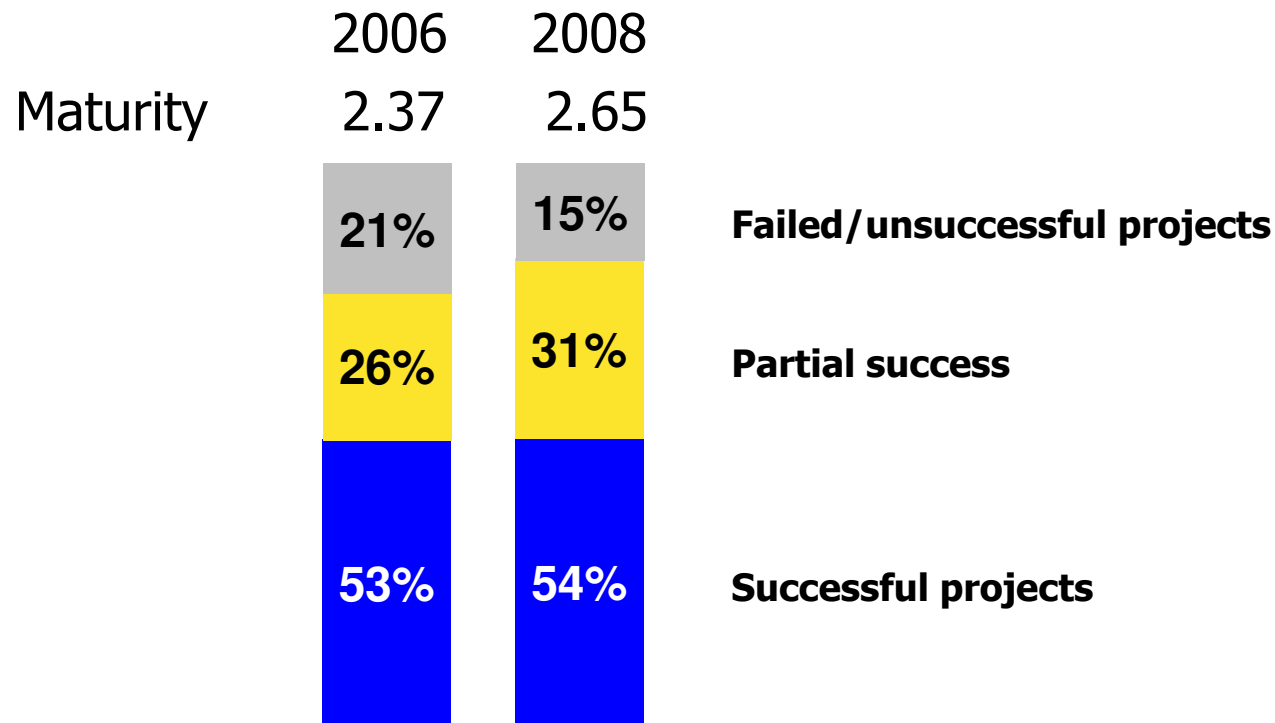
- **Successful project (or complete success or, simply, success):** The project ended on the planned date, cost and scope. Deviations of these three aspects were small and not significant. The client/user was fully satisfied, because the delivered product is being used and really added value to his work
- **Partially successful project (partial or compromised success):** The project was finished and the delivered software is being used. Nevertheless, compromising facts (significant delays and/or budget overruns and/or scope deviations) occurred or the user is partially satisfied because the product was not delivered on time and/or does not have all the expected and required features and/or does not add the expected value to the client's work.
- **Failed project:** The project was suspended or the delivered product is not being used because it does not fulfill the user's expectations, or the delay was so significant that the business lost money. The user/client is severely dissatisfied.

AVERAGE OF SUCCESSFUL PROJECTS: **54.1%**
(41 participants)



Source:

1) Archibald & Prado 2008 Research – www.maturityresearch.com

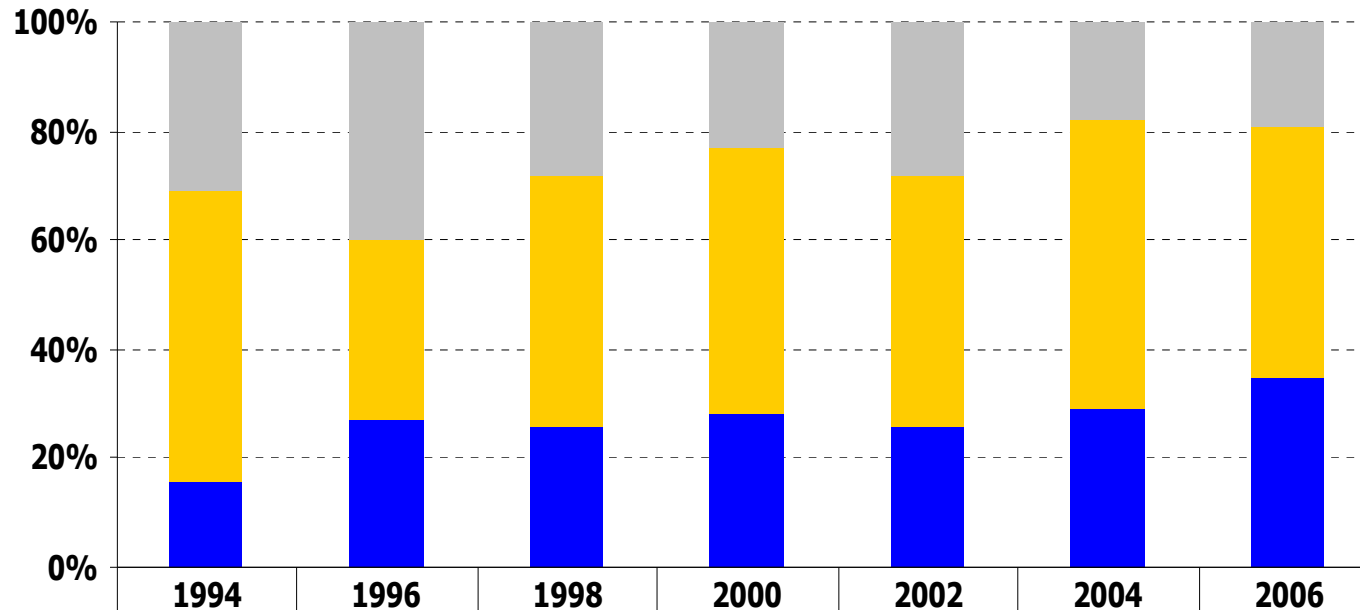


Note: The improvement seen on both success categories (Successful projects + Partial success) is coherent with the maturity improvement seen between 2006 and 2008.

Source:

- 1) Archibald & Prado 2008 and 2006 Research – www.maturityresearch.com

EVALUATION OF I.T. PROJECTS' SUCCESS (Chaos Report)



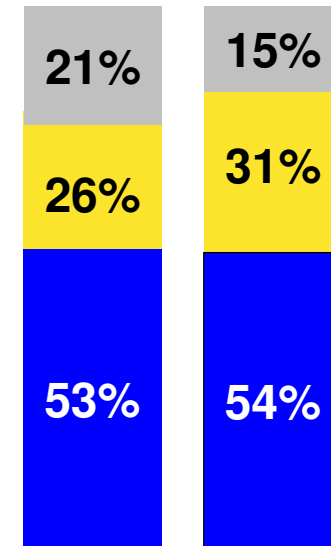
	1994	1996	1998	2000	2002	2004	2006
Failure	31%	40%	28%	23%	28%	18%	19%
Partial	53%	33%	46%	49%	46%	53%	46%
Success	16%	27%	26%	28%	26%	29%	35%

Source: Chaos Report

Sources:

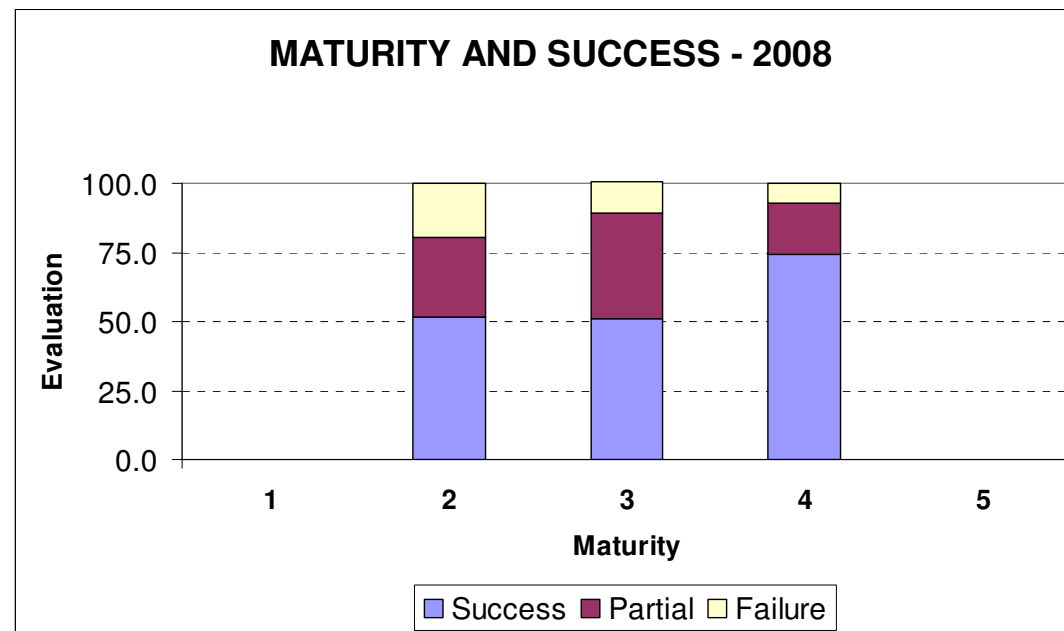
- 1) Standish Group - www.standishgroup.com/chaos
- 2) Archibald & Prado 2006 and 2008 Research - www.maturityresearch.com

BRAZIL 2006 2008



The result of crossing maturity (Prado-PMMM model) and success data is shown on the graph below. It covers data for maturity levels 2, 3 and 4 only. According to this, there is a correlation between maturity and success, in the following situations:

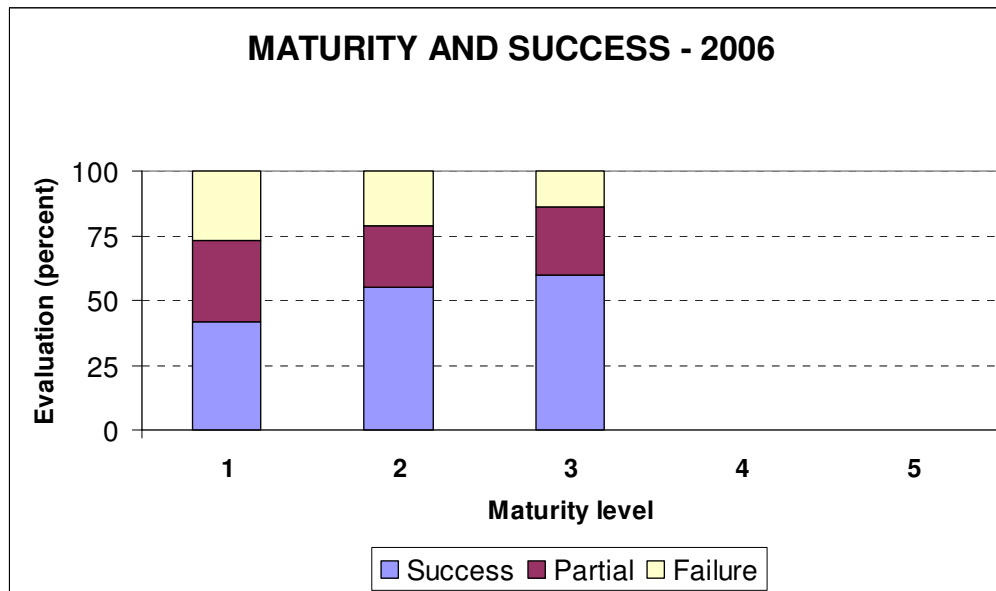
- Considering the sum of both success types (complete success + partial success)
- Considering failure values (inverse correlation between maturity and failure)



Important information:

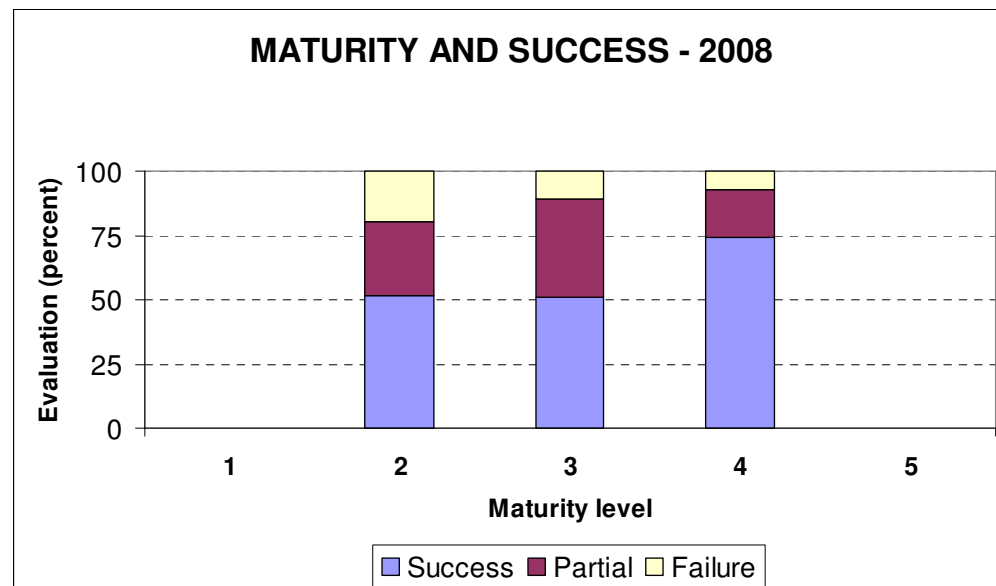
1. The sample size obtained in the research is very small (41 participants) and it strongly affects further information drill-downs, because sample sizes are even smaller.
2. The conclusions shown above need to be validated with a larger database.

Analysis: Maturity and Success 2006 / 2008 comparison



MATURITY	SUCCESS	PARTIAL	FAILURE
1	42.0	31.0	27.0
2	55.0	24.0	21.0
3	60.0	26.0	14.0
4			
5			
Weighted Avg.	53.0	26.0	21.0

Notice the significant failure reduction advancing from level 1 to 3



MATURITY	SUCCESS	PARTIAL	FAILURE
1			
2	51,6	28,7	19,7
3	50,4	37,3	12,3
4	74,0	19,0	7,0
5			
Weighted Avg.	54,1	30,6	15,3

Notice the significant failure reduction advancing from level 2 to 4

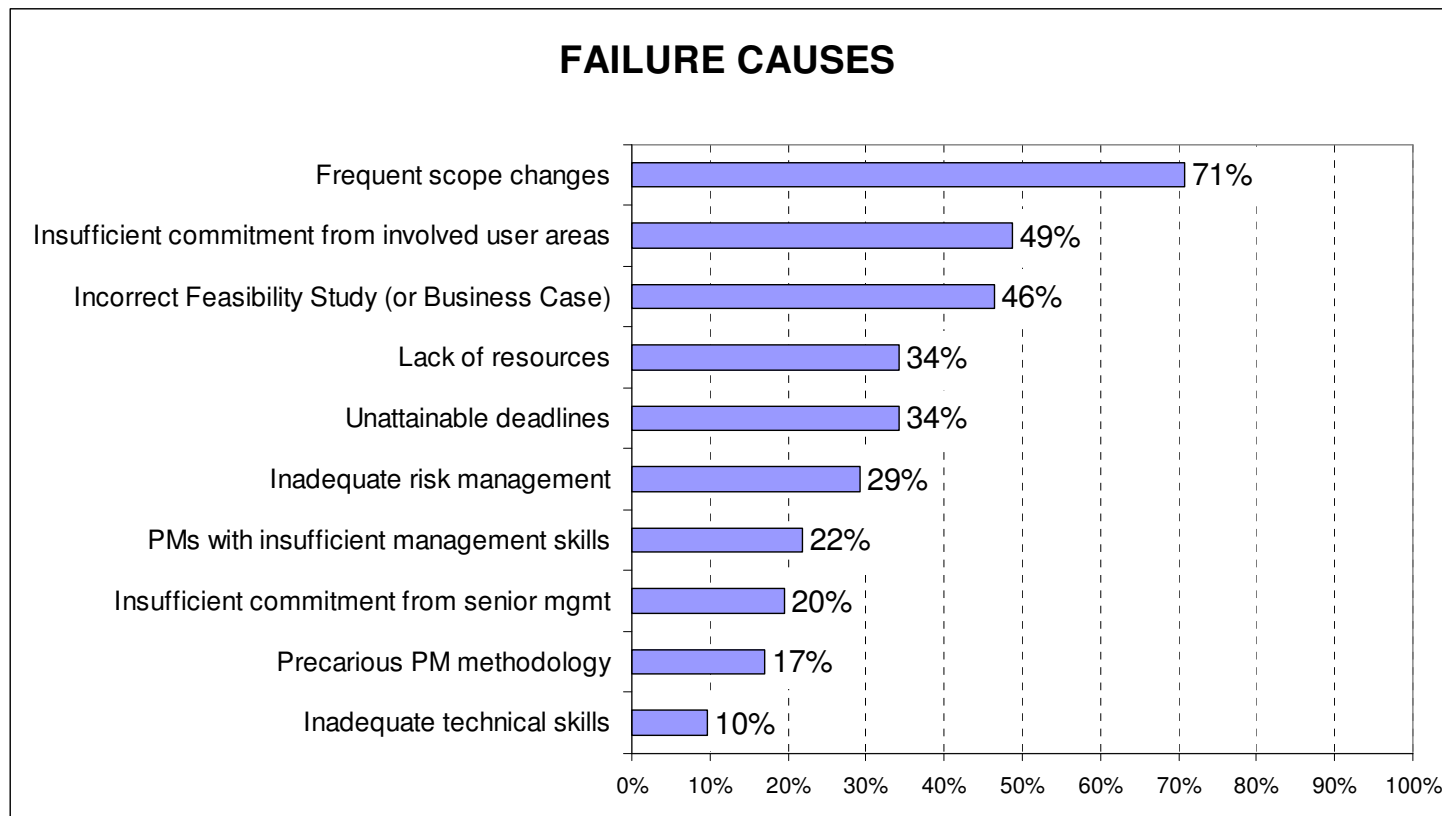
FAILURE CAUSES

For this survey, participants were instructed to point their three main project failure causes, according to the list below:

- A) Incorrect or incomplete Feasibility Study (or *Business Case* or *Business Plan*).
- B) Frequent scope changes.
- C) Unattainable deadlines.
- D) Insufficient or inadequate commitment from the involved user areas.
- E) Insufficient or inadequate commitment from senior management.
- F) Lack of resources (human, financial and material).
- G) Precarious project management methods, tools and techniques.
- H) Project managers with insufficient management skills.
- I) Insufficient or inadequate IT team's technical skills.
- J) Inadequate risk management.

MAIN FAILURE CAUSES:

- Frequent scope changes: 71%
- Insufficient commitment from user areas: 49%
- Incorrect or incomplete Feasibility Study (or Business Case): 46%



There is a very strong similarity between causes mentioned in 2008 and 2006

Who participated in this research

Who participated in the second stage

Business area	# participants
Food, beverages	2
Banks, financial, insurance	3
Construction	1
Consulting	1
Education	2
Metallurgy & Steelmaking	3
Oil and gas	2
Health	3
IT	19
Telecommunications	2
Other areas	3
TOTAL	41

Company type	# participants
Privately-owned	32
Government (Direct administration)	3
Government (indirect administration)	5
3rd sector	1

State	# part.
BA	2
DF	3
MG	6
RJ	7
RS	3
SP	14
Others	4

According to the tables shown, most of the participants come from:

- Privately-owned business
- IT business area
- SP, RJ and MG states

Projects completed in 2008	# part.
1 to 5	10
Between 5 and 10	9
Between 10 and 30	12
Between 30 and 100	9
More than 100	1

Time with an implemented PMO	# part.
Does not have a PMO	18
There is a PMO, less than 1 year.	3
Between 1 and 2 years	6
Between 2 and 5 years	12
More than 5 years	2

Amount of professionals	#
1 to 5	19
Between 5 and 10	7
Between 10 and 20	6
Between 20 and 50	6
More than 50	3

According to the tables shown, most of the participating companies have:

- Completed less than 100 projects in 2008
- No PMO or one with less than one year of existence.
- A maximum of 5 professionals involved with PM leadership.
- A grand total of 1,000 projects related to the research database.

COMITTEE

Russell Archibald, Darci Prado, Fernando Ladeira, Warlei Oliveira and Carlos E. Andrade

GENERAL COORDINATOR

Darci Prado

WEBSITE DEVELOPMENT

Warlei Oliveira, Carlos Eduardo Andrade and José Carlos Tinoco

DATA ANALYSIS (MATURITY AND SUCCESS IN IT)

Coordination: Marcus Vinicius Marques

Team: Marcus Vinicius Marques, Carlos Eduardo Andrade, Célio Nagao and Lucas Pinheiro da Silva Neto

PRELIMINARY REPORT (MATURITY AND SUCCESS IN IT)

Responsible: Darci Prado

COMPLETE REPORT (MATURITY AND SUCCESS IN IT)

Responsible: Darci Prado

Team: Carlos Eduardo Andrade, Darci Prado, Márcio Tibo and Marconi Vieira,

- Support:



- Promotion:

- Organizations, unions and associations:

- PMI chapters: AM, BA, DF, ES, GO, MG, PE, PR, RJ, RS, SC
- ABGP, IPMA
- MBC, ASBRAER, CBIC
- SUCESU: ES, MG, PR, RJ, RS, SC, SP
- FIEMG, SINDUSCON-MG, SICEPOT-MG
- CREA-SP, IPT-SP, ANPEI
- X.25

- Virtual Communities

- CLUBE-GP, SIG-GOV, SIG-PMBOK

- Post-graduate education schools

- FGV, FUNDAÇÃO DOM CABRAL, IETEC

THE END