Il modello di Darci Prado
(The Prado-PMMM)

Darci Prado
Roma – November, 24th, 2009
Italian Influence in Brazil

- 200 millions inhabitants in Brazil
- 30 millions of italic-descendants
- Strong Influence in food, culture, music, business and politics
- Thousands of italian enterprises

FIAT:
- Started: 1973
- 40 vehicles models
- 3,000 vehicles per day (biggest in the world, out Italia)
- Revenue: 9 billons Euros per year
Brazil

- PIB: Approximately 1 trillion dollars (11th in Word)

- BRI C

- EMBRAER (1969)
  - 3rd biggest aviation company in the world
  - 20,000 employes
  - Revenues: 4 billions Euros per year.
Brazilian Population Distribution (%)

- **38%** Class C
- **50%** Class D
- **34%** Class C
- **20%** Class D

Source: Folha de São Paulo – Caderno Dinheiro – Page B3 – 1st-Nov-09
INVESTIMENT RATE EVOLUTION
(% OF GNP)

Source: Folha de São Paulo – Caderno Dinheiro – Page B8 – 1st-June-09
Excuse-me for my italian mistakes

and let´s go back
to the presentation
Executive Summary

- The Prado-PMMM is based in a platform
- The Prado-PMMM is a simple and easy-to-use model
- The model results are the basis for establishing a Growing Plan
- There is a lot of statistics about Brazilian PM Maturity (since 2005)
Contents

• A PM Platform

• The Prado-PM Maturity Model

• The 2008 Brazilian PM Maturity Research Results
1 - A Platform for Project Management
A PLATFORM FOR PM

PM

ORGANIZATIONAL STRUCTURE

STRATEGIC ALIGNMENT

METHODOLOGY

INFORMATIZATION

COMPETENCE
COMPETENCE = KNOWLEDGE + EXPERIENCE + PERSONAL BEHAVIOR

- TECHNICAL COMPETENCE (PM ASPECTS)
- CONTEXTUAL COMPETENCE
  - BUSINESS AREA
  - APPLICATION SUBJECT
  - PORTFOLIO MANAGEMENT
- BEHAVIORAL COMPETENCE
METHODOLOGY

A SET OF METHODS, TOOLS AND TECHNIQUES WITH A COMMON PURPOSE THAT ESTABLISHES:

» WHAT / WHEN / HOW

• IT MUST BE APPROPRIATE FOR THE AREA WHERE IT WILL BE USED:
  – PROJECT CATEGORIES;
  – PROJECT SIZE.

• A PM METHODOLOGY MUST COVER:
  – AREAS OF KNOWLEDGE (such as the ones from PMBOK);
  – ORGANIZATIONAL ASPECTS;
  – INFORMATION TECHNOLOGY ASPECTS
A DATA WAREHOUSE THAT CONTAINS DATA ON PLANNING, CONTROL, AND FOLLOW-UP OF EACH PROJECT.

• ALLOWS PLANNING AND MONITORING OF EACH PROJECT

• DISPLAYS PORTFOLIO STATUS OF GROUPED DATA

• ALLOWS PORTFOLIO MANAGEMENT (viewing of KPIs)

• CONTAINS INFORMATION ABOUT FINISHED PROJECTS AND ALSO THEIR PERFORMANCE EVALUATION

• CONTAINS A “BEST PRACTICE” DATABASE
STRATEGIC ALIGNMENT
(Portfolio Management)

- Use of Portfolio Management Processes:
  - STRATEGIC ALIGNMENT
  - RISK ANALYSIS
  - MONITORING AND CONTROL
• ORGANIZATIONAL STRUCTURES FOR PROJECT MANAGEMENT OCCUR SIMULTANEOUSLY WITH THE LARGER ORGANIZATIONAL STRUCTURE OF THE COMPANY:
  – INSIDE THE PROJECT EXECUTING AREAS (or Departments)
  – AS ISOLATED SECTORS.

• THESE STRUCTURES ARE OF THE FOLLOWING TYPES:
  – PROJECT SUPPORT AND SUPERVISION:
    • PROJECT MANAGEMENT OFFICE (PMO)
    • COMMITTEE
    • SPONSOR
  – PROJECT EXECUTION:
    • PROJECT MANAGER AND HIS/HER TEAM
PMO: Project Management Office
EPMO: Enterprise PMO
2 - A Model for Project Management Maturity: The Prado PMMM
Prado PM Maturity Model

- Simplicity: questionnaire of 40 questions
- Universality: applicable to any organization or project type
- Easy to use: 1 or 2 hours of training
- Produces an index to differentiate the abilities to succeed in project management
- Clearly shows where improvements are needed
- Proven by over 4 years of broad research in Brazil and Portugal
The Prado-PMM Model©

<table>
<thead>
<tr>
<th>Levels</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Initial</td>
<td>1. Competences (Knowledge + Experience)</td>
</tr>
<tr>
<td>2. Known</td>
<td>• Technical competences</td>
</tr>
<tr>
<td>3. Standardized</td>
<td>• Contextual Competences</td>
</tr>
<tr>
<td>4. Managed</td>
<td>• Behavioral Competences</td>
</tr>
<tr>
<td>5. Optimized</td>
<td>2. Use of a Methodology</td>
</tr>
<tr>
<td></td>
<td>3. Use of Information Technology</td>
</tr>
<tr>
<td></td>
<td>4. Organizational Structure</td>
</tr>
<tr>
<td></td>
<td>5. Business Strategic Alignment</td>
</tr>
</tbody>
</table>
Level 1

WHAT IS IT?
- Inexistence of methodology and/or management models
- Use of intuition in project management
- Low knowledge levels on the subject
- Isolated personal efforts
- Overall disinterest

OPERATIONAL CHARACTERISTICS
- HERO myth
- Success is a result of good luck
- Low productivity
- Inexistence of follow-up (no data), but delays, overruns, scope incompleteness, etc are acknowledged.
Level 2
(Awareness - Isolated Initiatives)

WHAT IS IT?
Individual and isolated PM initiatives
No knowledge of what is already done and developed
Basic knowledge absorbed by those involved with projects (mainly through training and time software usage)
Templates non-existence

OPERATIONAL CHARACTERISTICS
HERO myth still present
Low productivity
Performance is unknown, but delays, overruns, scope incompleteness, etc are acknowledged.

BENEFITS
Beginning of a new culture development
Some good results
WHAT IS IT?:

Implementation of project management platform (standardized processes):

- ORGANIZATIONAL STRUCTURE
- METHODOLOGY
- INFORMATIZATION
- ALIGNMENT WITH BUSINESS (Portfolio Management)

Standardized processes, used by the main involved people
Increase in competences
**Level 3**
*(Existence of Standards)*

**OPERATIONAL CHARACTERISTICS**
- Discipline, order and organization establishment
- Broken paradigms
- Constant learning
- An urge for improvements

**BENEFITS**
- Better visibility of project execution
- Increase on the level of success and client satisfaction
- Feeling that the right path has been found and that things have started working out
- Motivation for new challenges and individual growth
Level 4
(The standards really Work)

WHAT IS IT?
- Improved platform: confirmation that the standards work
- Deviations identified and eliminated
- Efficient human relationships
- Portfolio management consolidation

OPERATIONAL CHARACTERISTICS
- Everyone knows what to do, when and how
- Everyone accomplishes efficiently and effectively her/his share of work

BENEFITS
- High level of success and client satisfaction
- Empowerment feeling
5- OPTIMIZED:

• Optimization:
  • Schedule
  • Cost
  • Quality
  • Management processes
4. Regarding to the planning of each new project and the production of the Project Plan, it is possible to say that:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>This process is done according to standards already established that demand several meetings among the main stakeholders, and the model has peculiarities for small, medium, and big projects. The model is well accepted and is in use for more than one year.</td>
</tr>
<tr>
<td>B</td>
<td>The existing situation is lightly inferior to the one presented at item A.</td>
</tr>
<tr>
<td>C</td>
<td>The existing situation is significantly inferior to the one presented at item A.</td>
</tr>
<tr>
<td>D</td>
<td>Studies are been done to establish how to plan the new projects.</td>
</tr>
<tr>
<td>E</td>
<td>There is no standard in use and there is no plan to develop a new one. The existing processes are intuitive and depends on each one.</td>
</tr>
</tbody>
</table>

A=10  B=7  C=4  D=2  E=0

**ASPECT OF PM**

**Full characteristics**
The Questionnaire Structure

QUESTION

ASPECT OF PM

OPTION A
Full characteristics

OPTION B
Lightly Inferior to A

OPTION C
Significantly Inferior to A

OPTION D
Starting to implement

OPTION E
Nothing
**Valutazione finale: 2.33**

**FINAL MATURITY ASSESSMENT**

FMA = (100 + Total_of_Points) / 100

FMA = (100 + 133) / 100

FMA = 2,33
YOUR ASSESSMENT INTERPRETATION

Your Assessment: 2,33

COMFORT ZONE

Excellent
Good
Fair
Low
Very Low
### L’aderenza ai Dimensioni

<table>
<thead>
<tr>
<th>Dimensione</th>
<th>%</th>
<th>Aderenza (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competenza tecnica</td>
<td>45</td>
<td>40</td>
</tr>
<tr>
<td>Metodologia</td>
<td>35</td>
<td>30</td>
</tr>
<tr>
<td>Computerizzazione</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>Struttura Organizzativa</td>
<td>26</td>
<td>20</td>
</tr>
<tr>
<td>Behavioral Competenza</td>
<td>23</td>
<td>30</td>
</tr>
<tr>
<td>Allineamento strategico</td>
<td>53</td>
<td>60</td>
</tr>
</tbody>
</table>

**COMFORT ZONE**
Establishing of a Growing Plan

YOUR ASSESSMENT RESULTS ARE THE BASIS FOR ESTABLISHING A GROWING PLAN
Maturity and Performance
(Example: Time Management)

<table>
<thead>
<tr>
<th></th>
<th>PLANNED</th>
<th>REAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No Forecast</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Difficulties and Uncertainties when forecasting</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Work differs from forecast, mostly because of execution problems</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Highly accurate forecasts</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Optimized and highly accurate forecasts</td>
<td></td>
</tr>
</tbody>
</table>
3 -  Maturity Research in Brazil

2008 Global Results

2008 I.T. Results

www.maturityresearch.com
Research Overall Coordination

RUSSEL D. ARCHIBALD
- MSC, PhD
- PMP, IPMA
- Founder of PMI-USA
- World known consultant
- ‘‘Who’s Who In the World’’
- Project Category Model

DARCI PRADO
- IBM
- IPMA – Level B Certified
- Founder of PMI-MG and IPMA-MG
- INDG Partner & Consultant
- PM Methodology
- PhD in progress
- Maturity Model
The Research Site (since 2005)

- Web Site in 3 languages (www.maturityresearch.com)
- Free use and free results
- 60 volunteers

Global Maturity Report (180 pages)
IT Success Report (70 pages)

RESEARCH DATA
DEPOSITIONS
CASES
VIRTUAL LIBRARY
Expert’s Analysis
Archibald’s Project Categories

1. Aerospace/Defense Projects
2. Business & Organization Change Projects
3. Communication Systems Projects (data, voice, image)
4. Event Projects
5. Facility design/procurement/construction
6. Information Systems (Software) Projects
7. International or Regional Development Projects
8. Media & Entertainment Projects
9. Product and Service Development Projects
10. Research and Development Projects
11. Other categories

There are significant differences in the way these project (and portfolio) categories should be managed.
2008

Global Results - Brazil
Global Results 2008

Average overall maturity: 2.66

MATURITY BY ORGANIZATION TYPE

- Private Sector: 2.73
- Third Sector: 2.66
- Government - Indirect Administration: 2.40
- Government - Direct Administration: 2.33

Comfort Region
Stratified Results: Categories

MATURITY BY PROJECT CATEGORY
(According to Archibald's Model)

- Research and Development: 2.19
- Regional & International Development: 2.36
- Information Systems (Software): 2.65
- Facilities (construction, assembly): 2.66
- Business & Organization Change: 2.74
- Product and Service Development: 2.81

Maturity Level

Comfort Region

[Graph showing the maturity level for different project categories]
Stratified Results: Business Areas

MATURITY BY BUSINESS TYPE

- Consulting: 3.12
- Oil and gas: 3.11
- Steelmaking: 2.91
- Construction: 2.81
- Foods & Beverages: 2.81
- Information Technology (software/hardware): 2.79
- Banking, finance, insurance: 2.67
- Engineering: 2.59
- Telecommunications: 2.47
- Health Care: 2.45
- Agriculture, Cattle raising, forest exp.: 2.17

Comfort Region
Maturity And Success in I.T. Projects - Information System:

- Development of Applications
- Packages installation from external suppliers
- Packages installation on customers
- Applications maintenance (big ones)
I.T. Maturity
I.T. Project Category - Evolution

I.T. EVOLUTION

2005: 2.53
2006: 2.37
2007: 2.65
2008: 2.53

Maturity
I. T. Project Category Evolution

Conclusion: Significant growth at level 3
I.T. Success
I.T. Types of Success
(Standish Group)

• Usual evaluation of a completed project in Real World:
  • Success
  • Partial success
  • Failure or disaster

Obs: Evaluation types inspired at Standish Group Chaos Report
• **Success:** Project was completed on time, within budget and approved scope (*with no significant deviation*). The user is totally satisfied, and the product delivers real value to the business.

*Obs: Definition inspired at Standish Group Chaos Report*
Partial (or challenged) Success: The project was finished and the software is used. However, the project experienced serious problems (significant delay and/or budget overrun) and user satisfaction is partial, or the product does not perform as expected, and/or does not have all the functionality desired and necessary, and/or does not add the expected value to the work or business.

Obs: Definition inspired at Standish Group Chaos Report
• **Failure:** The project was cancelled or paralyzed, the product delivered does not serve the intended purpose or does not meet the user expectations, or the delay caused serious business losses. The user/client is profoundly dissatisfied.

*Obs: Definition inspired at Standish Group Chaos Report*
Results: 2006 and 2008 IT Projects in Brazil

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maturity</td>
<td>2.37</td>
<td>2.65</td>
</tr>
<tr>
<td>Failed/ unsuccessful projects</td>
<td>21%</td>
<td>15%</td>
</tr>
<tr>
<td>Partial success</td>
<td>26%</td>
<td>31%</td>
</tr>
<tr>
<td>Successful projects</td>
<td>53%</td>
<td>54%</td>
</tr>
</tbody>
</table>

Source:
1) Archibald & Prado 2008 Research - [www.maturityresearch.com](http://www.maturityresearch.com)
Comparison with Chaos Report (I.T.)
(USA+Canadá)

AVALIAÇÃO DO SUCESSO DE PROJETOS DE T.I.
(Chaos Report)

<table>
<thead>
<tr>
<th>Year</th>
<th>Fracasso</th>
<th>Parcial</th>
<th>Sucesso</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>31%</td>
<td>53%</td>
<td>16%</td>
</tr>
<tr>
<td>1996</td>
<td>40%</td>
<td>33%</td>
<td>27%</td>
</tr>
<tr>
<td>1998</td>
<td>28%</td>
<td>46%</td>
<td>26%</td>
</tr>
<tr>
<td>2000</td>
<td>23%</td>
<td>49%</td>
<td>28%</td>
</tr>
<tr>
<td>2002</td>
<td>28%</td>
<td>46%</td>
<td>26%</td>
</tr>
<tr>
<td>2004</td>
<td>18%</td>
<td>53%</td>
<td>29%</td>
</tr>
<tr>
<td>2006</td>
<td>19%</td>
<td>46%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Fonte: Chaos Report

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

BRAZIL
2006 | 21% | 53%
2008 | 15% | 54%
Maturity Level Versus Success

MATURITY AND SUCCESS - 2008

Evaluation (Percentage)

0% 25% 50% 75% 100%

Assessment

Maturity

1 2 3 4 5

Success Partial Failure
CONCLUSION: Maybe it is possible to say that the smaller the organization (Revenue/Budget) greater the success level!
The Importance of PMO
PMO: A Subject of Fashion

Main Studies:

- Brian Hobbs (UQM – 2007): 500 Organizations EUA + Canada + Europa
- Desouza & Evaristo (2006): 32 IT Organizations

Main conclusions:

- There are several settings of PMO with various types of functions
- There is no consensus on the value of the PMO in academia:
  - Supporters
  - Critics
Some Brazilian Results

CONCLUSION

We found a positive relationship between the age of PMO and Project Success.
Failure Causes
**Analysed Data**

**Data Source:**

**Research first stage**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>% Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Competence</td>
<td>23%</td>
</tr>
<tr>
<td>Organizational Structure</td>
<td>47%</td>
</tr>
<tr>
<td>Strategic Alignment</td>
<td>39%</td>
</tr>
<tr>
<td>Methodology</td>
<td>41%</td>
</tr>
<tr>
<td>Informatization</td>
<td>37%</td>
</tr>
<tr>
<td>Technical (GP) and Contextual Competence</td>
<td>33%</td>
</tr>
</tbody>
</table>

**Data Source:**

**Research second stage**

**FAILURE CAUSES**

<table>
<thead>
<tr>
<th>Cause</th>
<th>% Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope change</td>
<td>71%</td>
</tr>
<tr>
<td>Lack of involvement of users areas</td>
<td>49%</td>
</tr>
<tr>
<td>Incorrect or incomplete Business Case</td>
<td>46%</td>
</tr>
<tr>
<td>Resources not available</td>
<td>34%</td>
</tr>
<tr>
<td>Deadlines unattainable</td>
<td>34%</td>
</tr>
<tr>
<td>Risks not managed</td>
<td>29%</td>
</tr>
<tr>
<td>Poor management ability of managers</td>
<td>22%</td>
</tr>
<tr>
<td>Poor high administration involvement</td>
<td>20%</td>
</tr>
<tr>
<td>Poor PM methodology</td>
<td>17%</td>
</tr>
<tr>
<td>Insufficient IT technical ability</td>
<td>10%</td>
</tr>
</tbody>
</table>
Causes: Project Life Cycle

The average dimension’s adherences suggests that there are **DEFICIENCIES IN THE MANAGEMENT OF PROJECTS**
CAUSES: Before the Project Life Cycle

Some important causes are found before the development / implementation of the application
CAUSES: Before the Project Life Cycle

CONCLUSION: The IT area has not been effective in Portfolio Project Management
The End

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