

Archibald & Prado 2008 Research

Final Report Summary Version

January 15th, 2009

Organized by:
José Carlos Tinoco
Warlei A. Oliveira

This is the **final report – condensed version** of the Archibald & Prado research results, regarding the year of 2008. The complete report will be presented in April 2009, containing all data as well as extensive analysis of the results made by experts.

The research was available, for free, at the www.maturityresearch.com website from October to December 2008. The research was taken by **310** professionals of all kinds of Brazilian organizations. The website was also used by dozens of students which have been using the maturity model on their postgraduate study works.

The final results showed an **average maturity of 2.66**. This is a good score for Brazilian organizations, if we take into account the small amount of time on which Project Management became widely known in Brazil. It is also a noticeable development in comparison with previous years' data (this is the 3rd research year). Nevertheless, it is certainly a low score when we realize how much still has to be done.

All results that follows are consolidated and, as we informed in our website, all information is under the following premises:

- Only groups with more than 10 participants are shown;
- Individual maturity data will *not* be made available on any media;
- Detailed info will be presented on the **Complete Report**.

2008 results

- Overall results
- Previous years comparison
- Drilled-down results
- Who are the benchmarks
- Participants' profile

Prado-PMMM model revision

Participants list

Research team

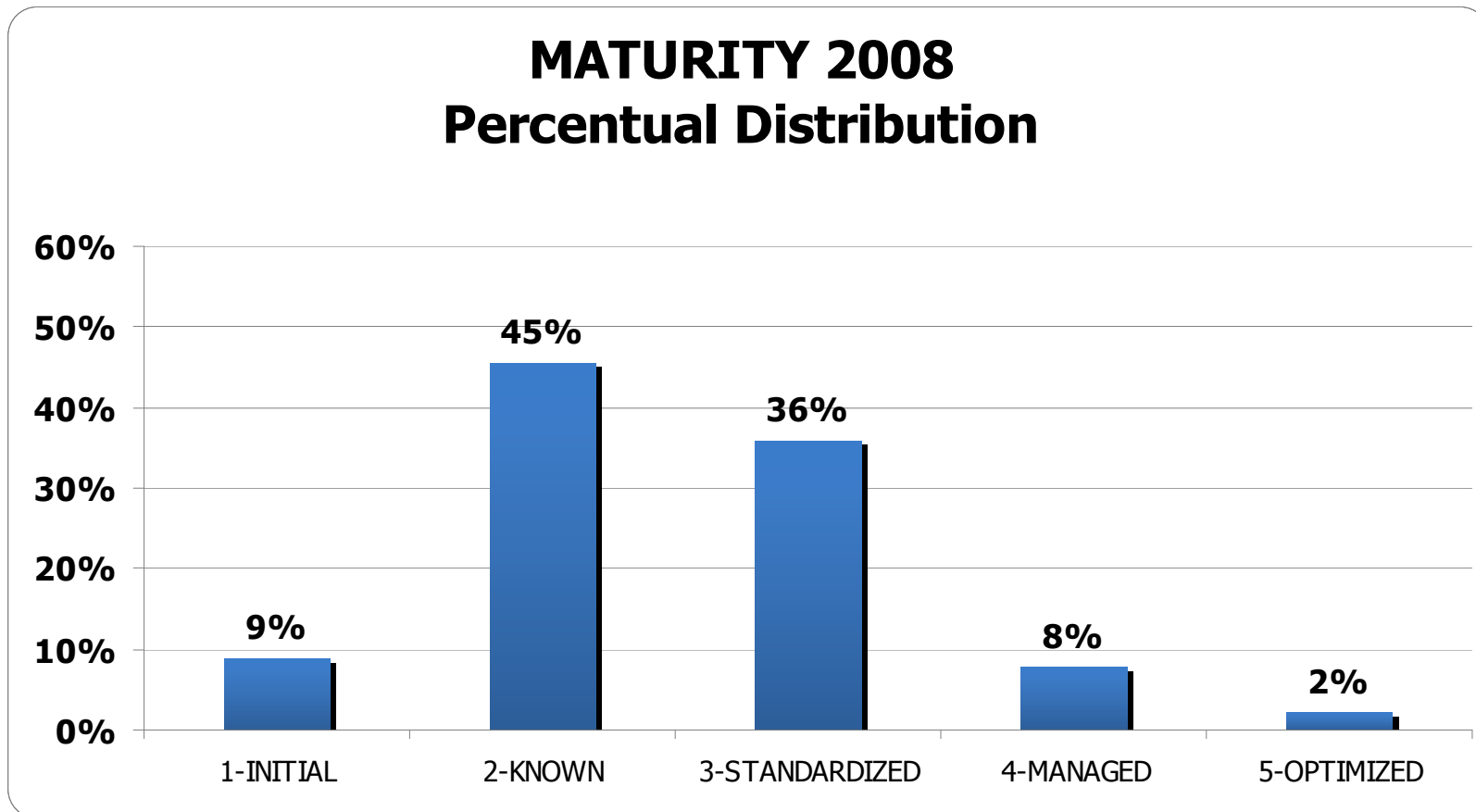
Thanks

This part of the report contains:

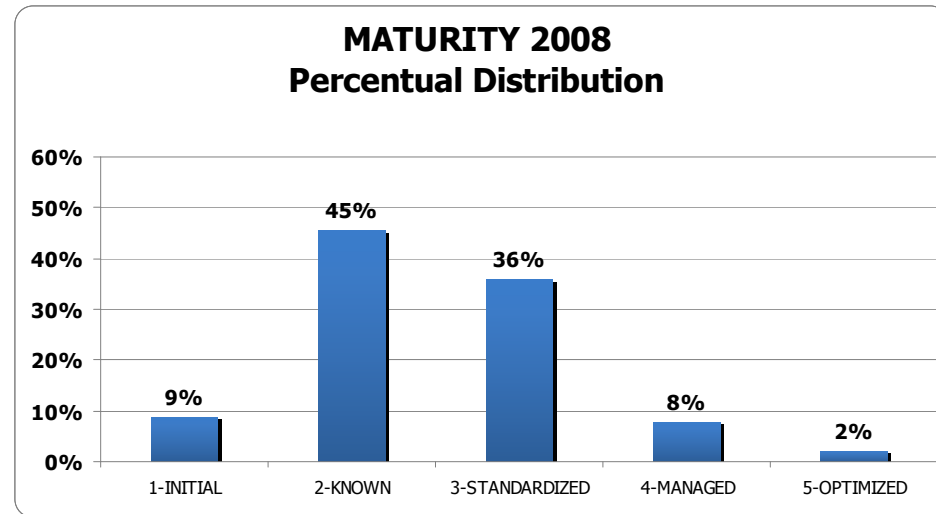
- Overall maturity
- Previous years comparison
- Maturity drilled down by:
 - Organization type
 - Project Category
 - Business type
- Who are the benchmarks
- Participants' profile

Note: Refer to slides 27 and 28 for the groups of participants and average maturity

Average overall maturity: **2.66**



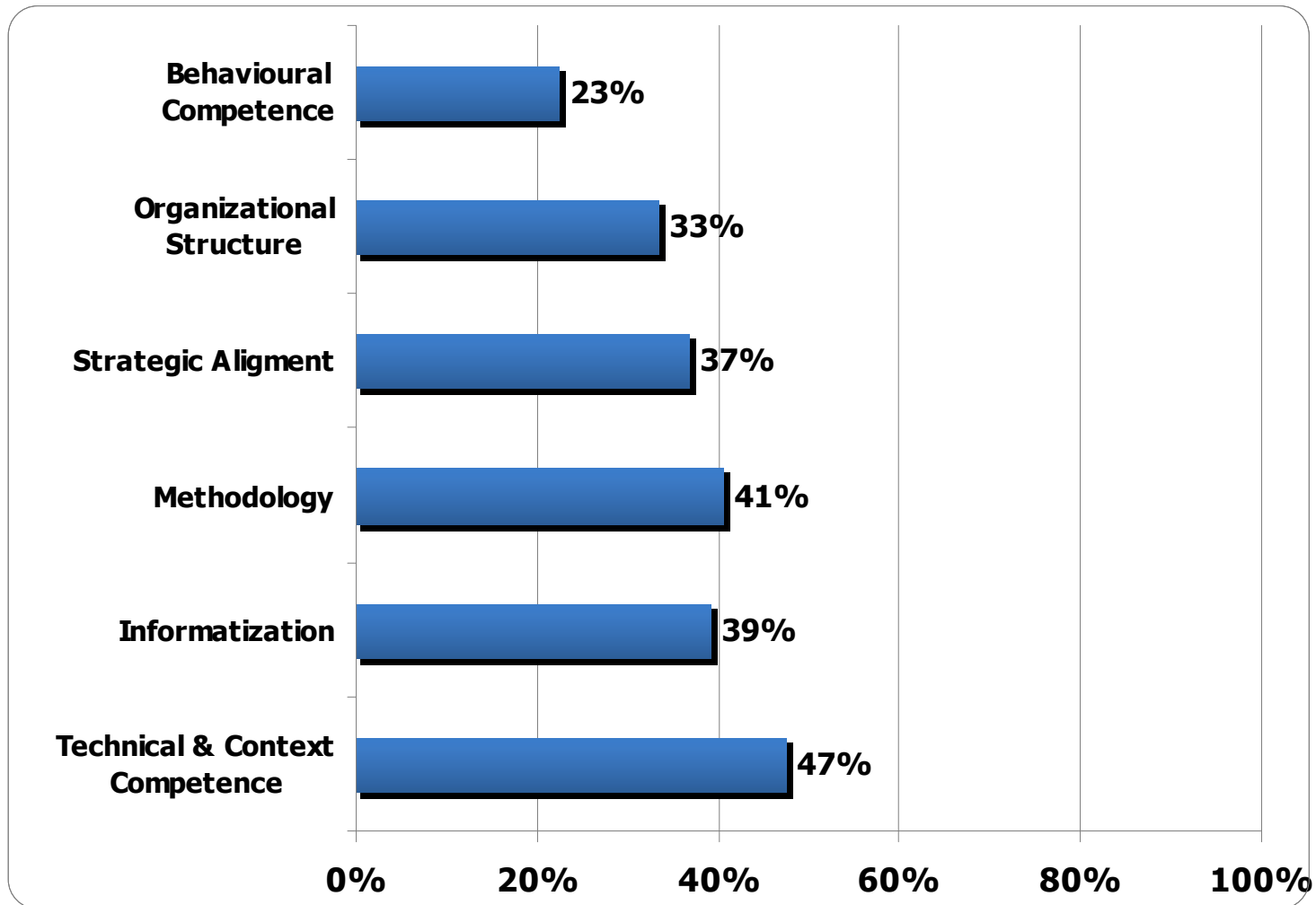
- Nível 1** 9% haven't started evolving.
- Nível 2** 45% invested in knowledge.
- Nível 3** 36% implemented standards.
- Nível 4** 8% dominate the process.
- Nível 5** 2% reached the optimized level.



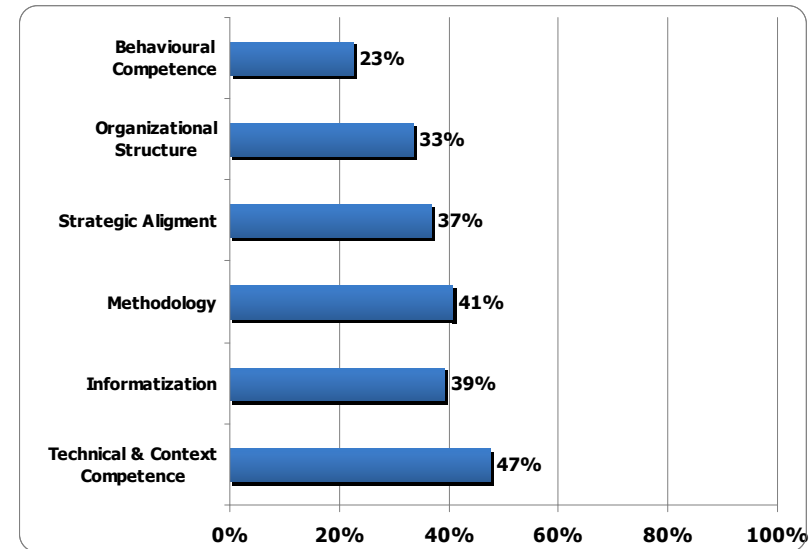
Comments

- On 54% (levels 1 and 2) of the participant organizations, Project Management still does not bring results to their business in the way they wish. (3, 4 and 5);
- Only 10% of the participant organizations belong to levels which allow work dominance and optimization (levels 4 and 5).

Attachment to dimensions



Dimension	Attachment percentage
Behavioural Competence	23%
Organizational Structure	33%
Strategic Alignment	37%
Methodology	41%
Informatization	39%
Technical & Context Competence	47%



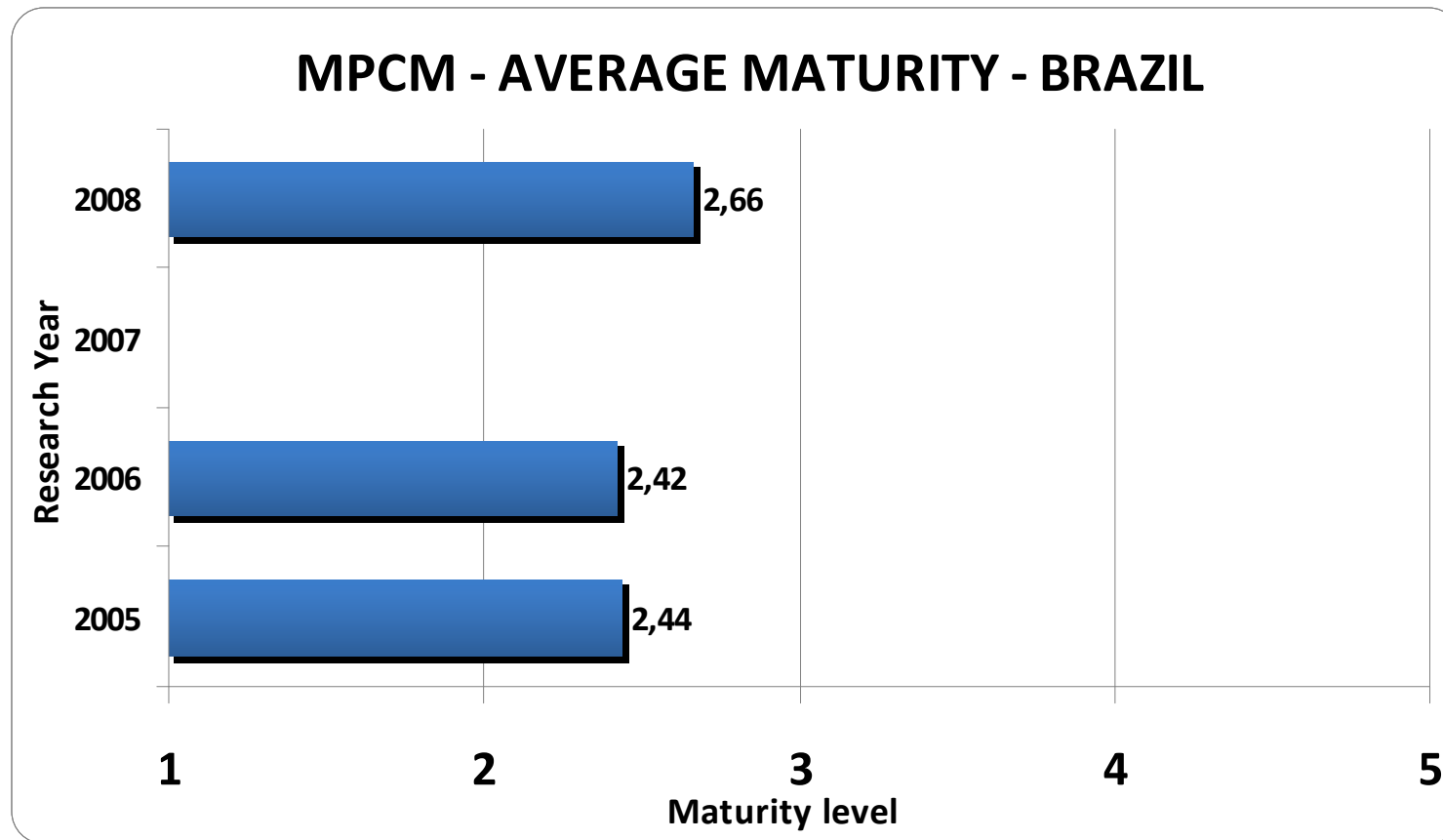
Interpretation of results

The results show that:

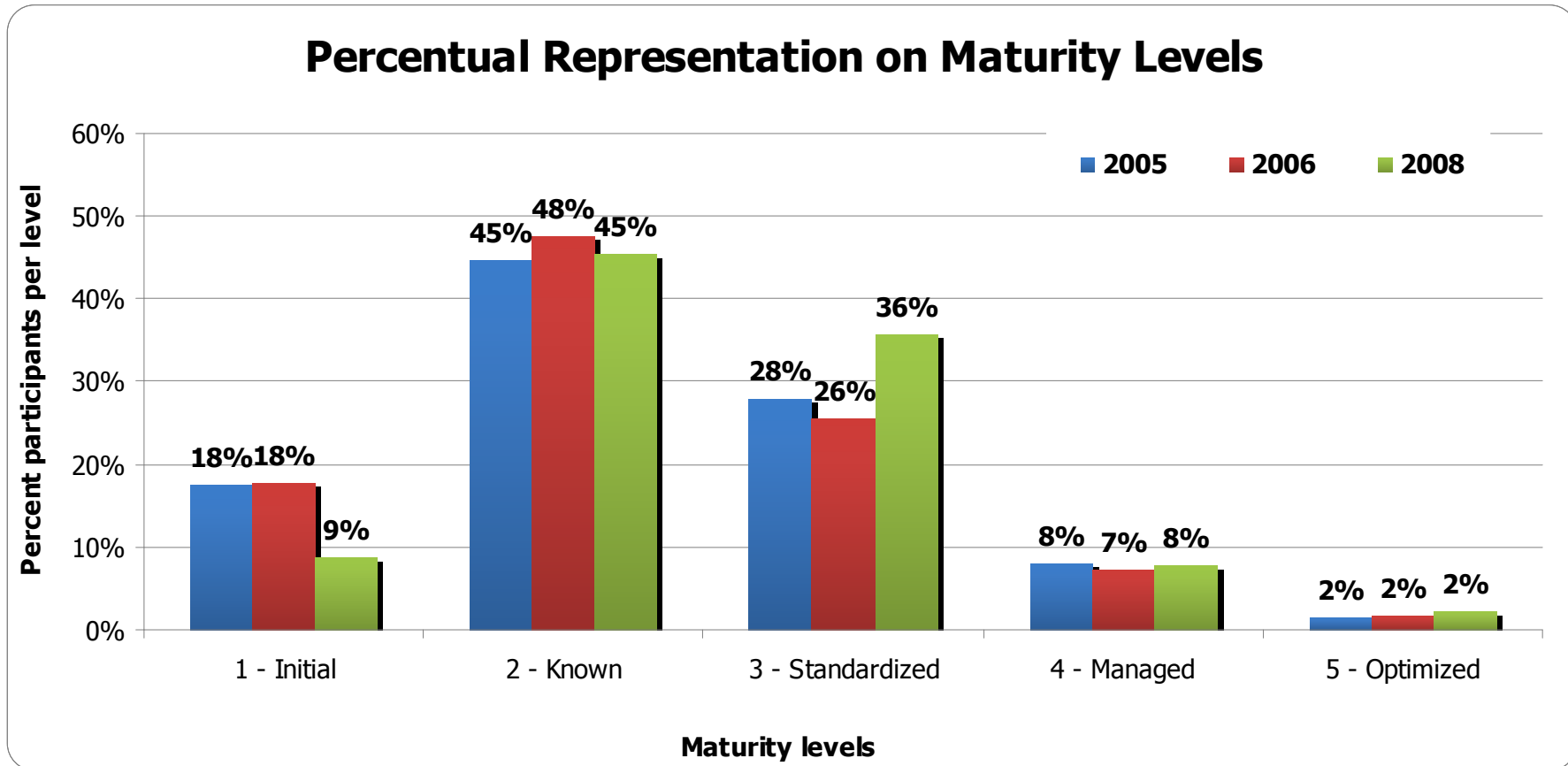
- “Technical & Context Competence”, “Informatization”, and “Methodology” dimensions are leading;
- “Behavioural Competence” and “Organizational Structure” dimensions are the last ones.
- All scores are, certainly, very low.

Conclusions:

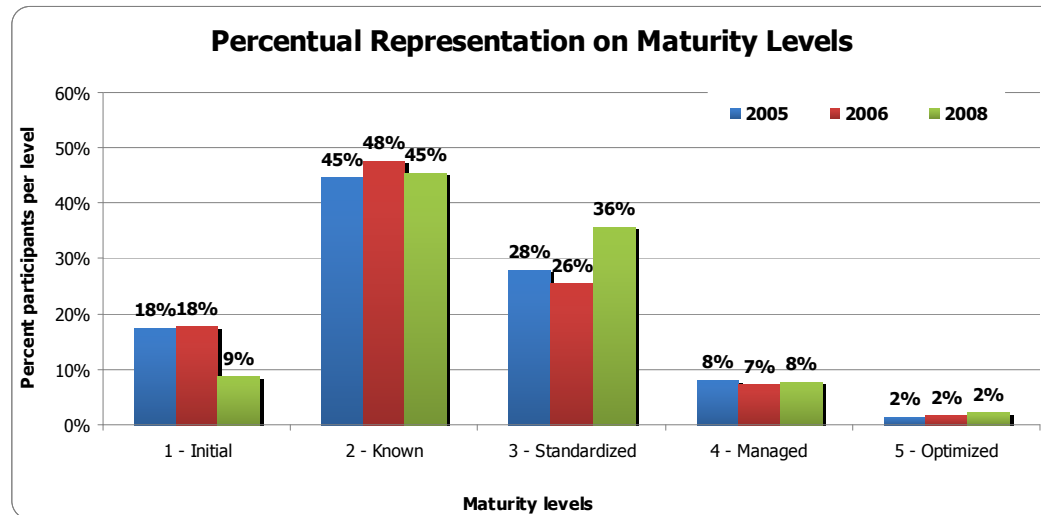
- On the majority of organizations, evolution is focused on “Technical & Context competence”, “Informatization” and “Methodology” dimensions.



Note: There was no research in 2007.



Note: There was no research in 2007.



Comments

- The improvement of the average global maturity score can be seen as a result of organizations moving from level 1 to level 2 and from level 2 to level 3 – a smaller presence on level 1 and an increase on level 3.
- Considering the importance of being at level 3, the improvement is very significant and should be celebrated.
- It is certainly the consequence of the Project Management efforts that can be seen all across Brazil: there is lots of PM training available, plus PM magazines and other publications, and events (such as congresses) that attract worldwide attention to the country.
- This seems to be motivating Brazilian organizations, making them take Project Management as something really important.

The data shown below was obtained from consolidated groups of organizations, grouped by organization type, project category and business type.

Std. Deviation = 0.81	
Sample size	Error range
1008	±0.05
311	±0.09
252	±0.1
63	±0.2
28	±0.3
16	±0.4
10	±0.5

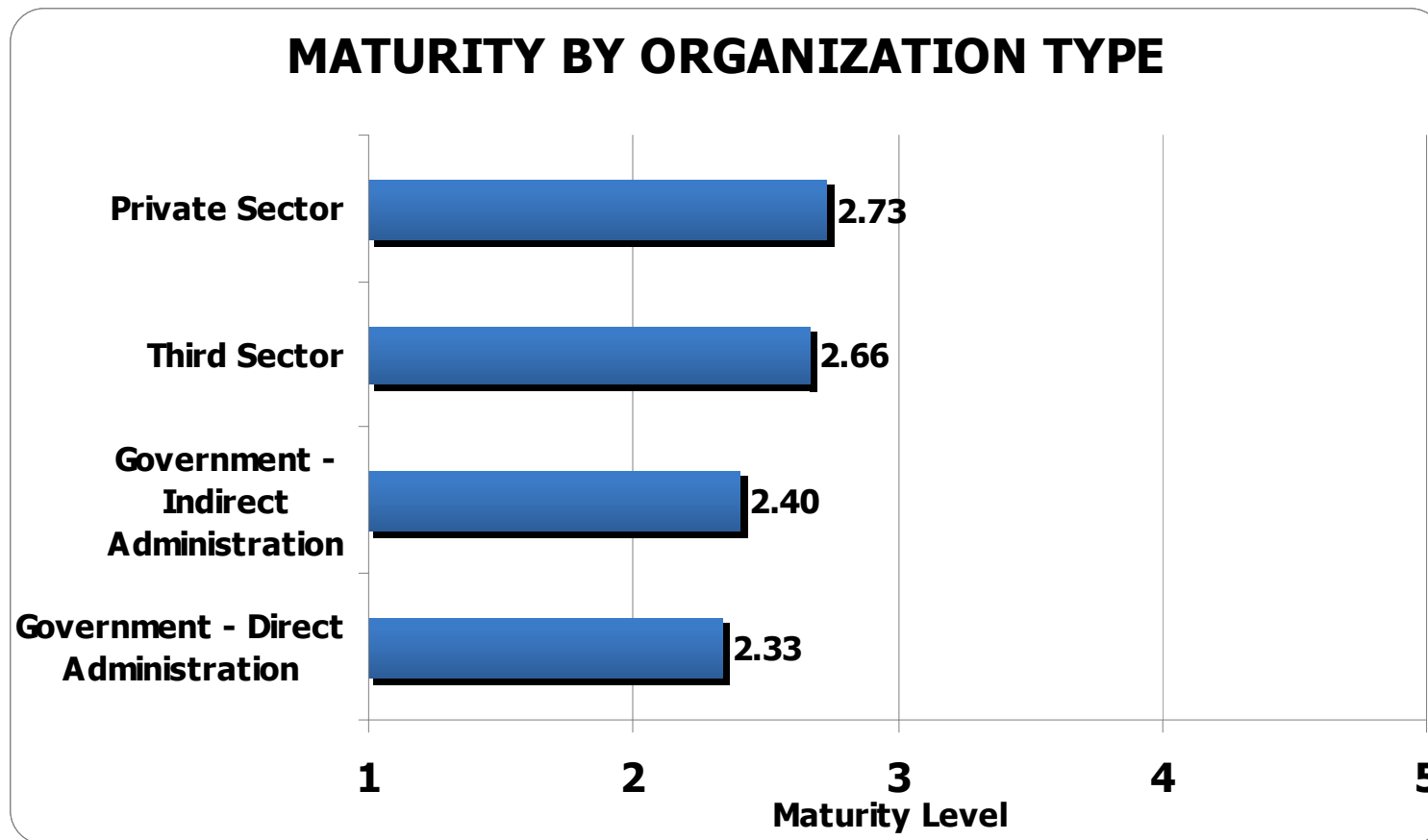
When we analyze the consolidated results, the following question arises: which is the error range for different sample sizes? This question matters even more considering that the sample sizes range from 5 to 220. According to statistics (Sample Size Analysis), for this survey's data, we have the correlations between sample size and error ranges shown on the table to the left.

Considering this research's objectives, an error rate of ± 0.3 was considered acceptable; error rates above ± 0.5 were considered unacceptable.

The portions of text ahead follow the criteria below:

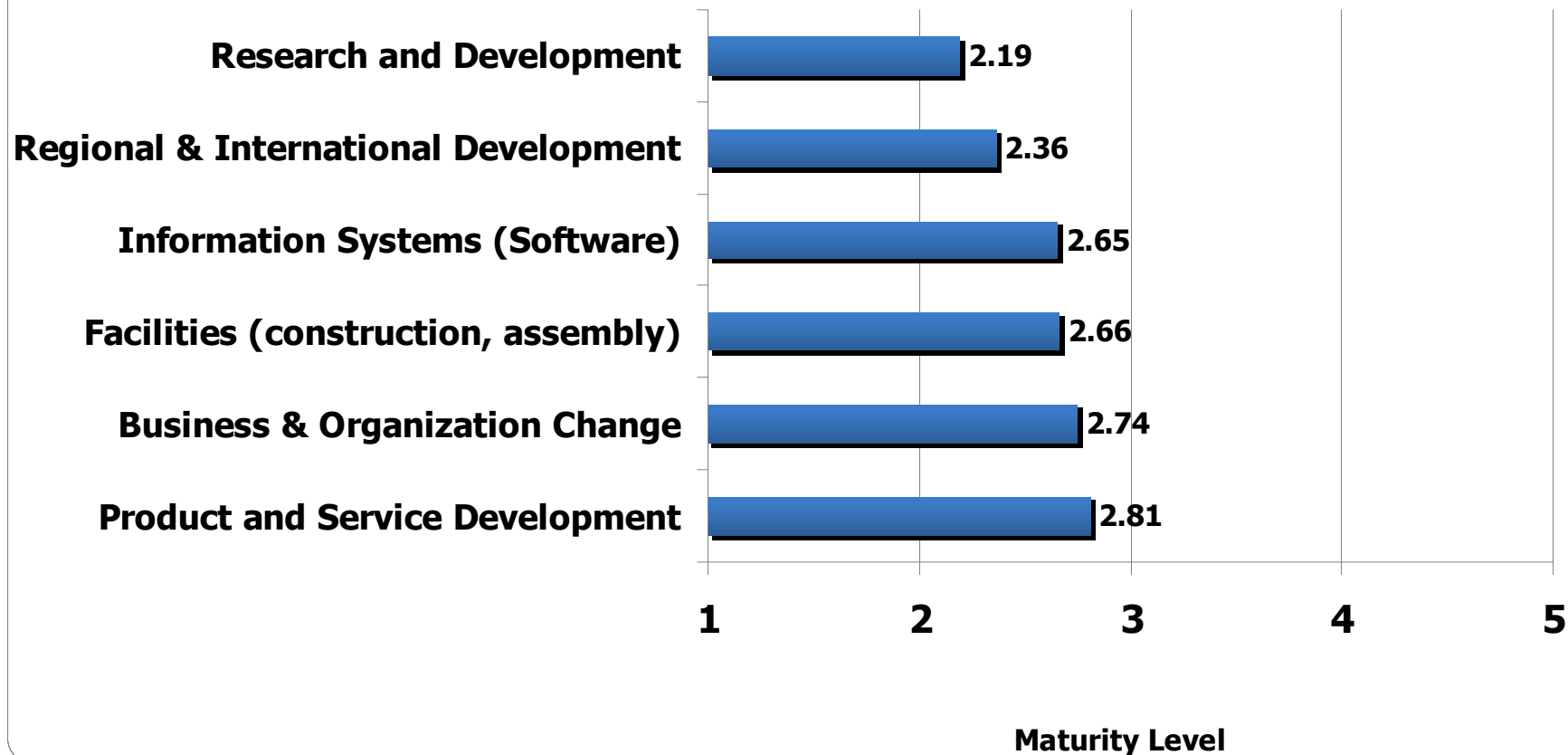
- A warning text is provided whenever a group contains less than 28 participants;
- Groups with less than 10 participants will not be shown;

Average maturity by organization type

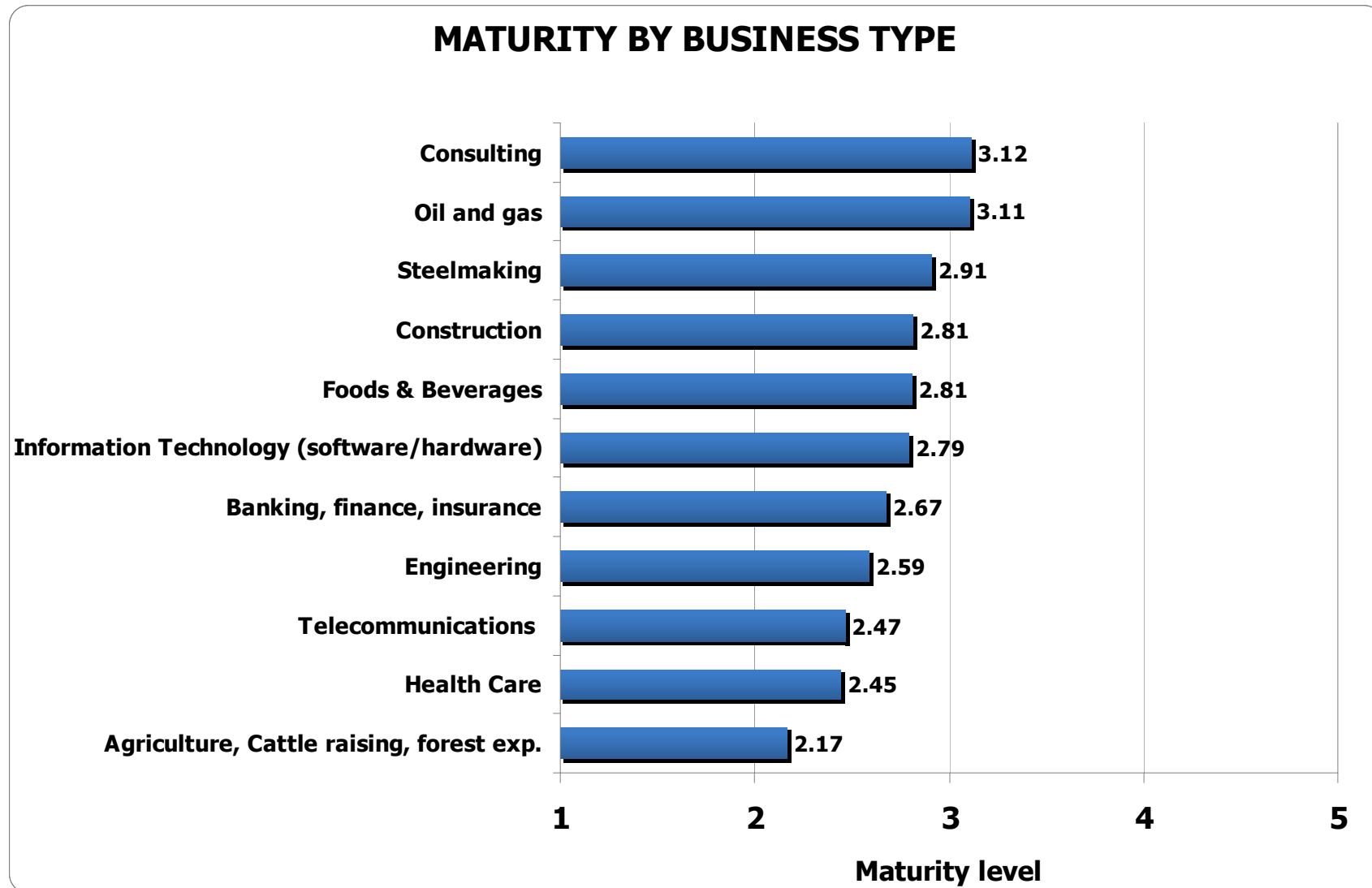


Note: "Government – Direct Administration" sample had 16 participants.

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



Note: "Regional & International Development" and "Research and Development" samples had less than 28 participants.

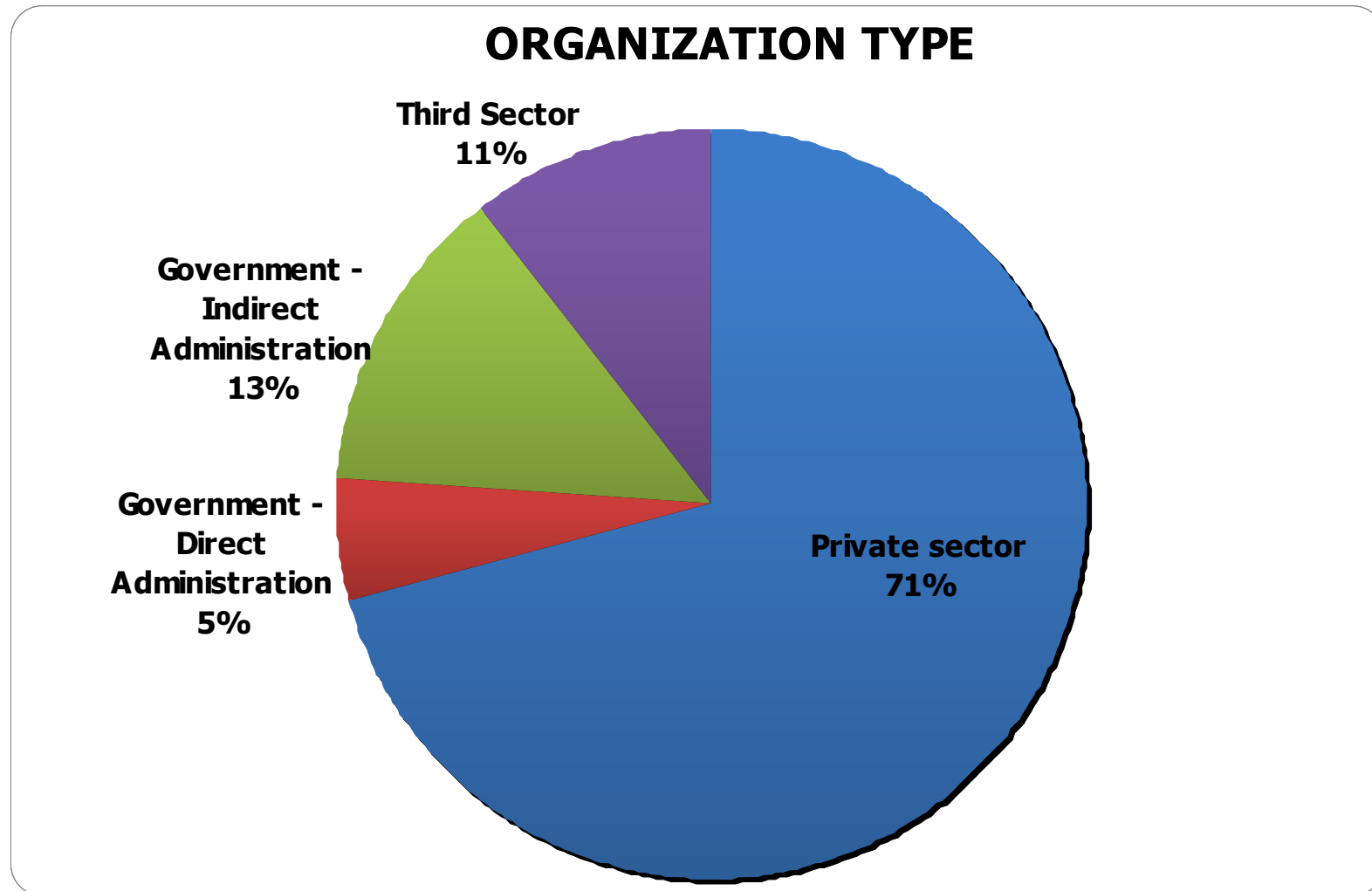


Note: Only "Foods", "Consulting", "Health care" and "IT" categories had more than 28 participants.

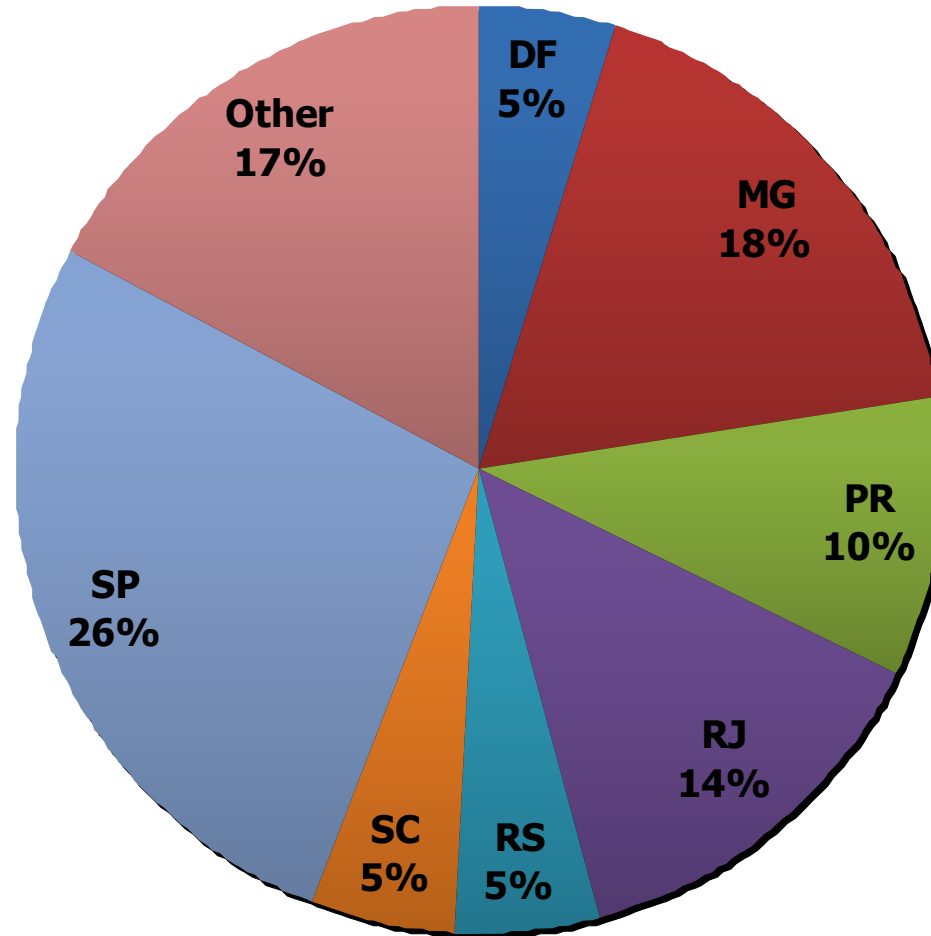
Who are the 32 organizations that reached a maturity score of 4 or 5?

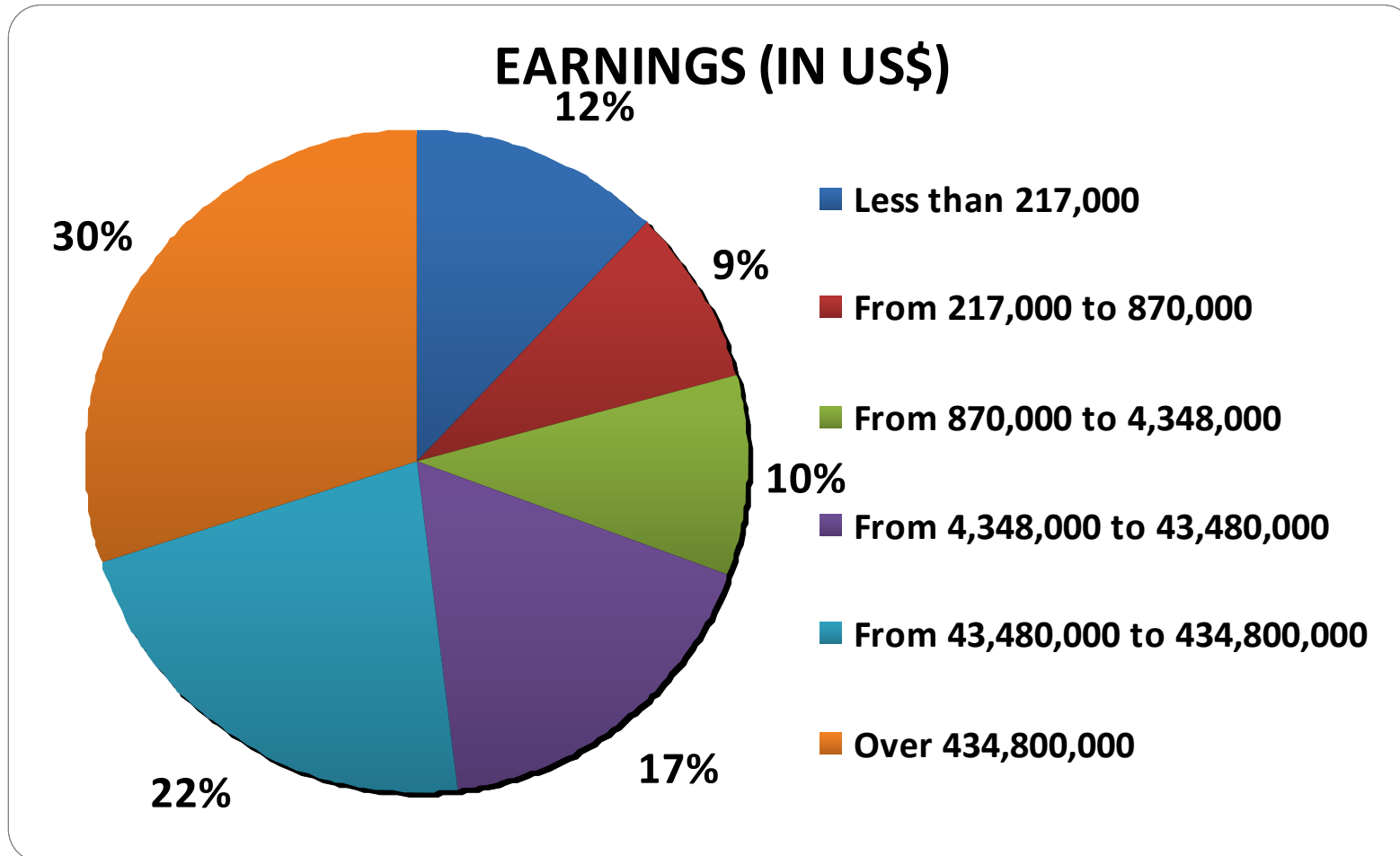
- By state: 8 organizations are in Rio de Janeiro; São Paulo (with 7) and Minas Gerais (with 5) also stand out;
- By type: 28 are private, 2 are government organizations (indirect administration), 2 are in the Third Sector.
- By category (Archibald): "Business and organizational changes" stands out with 10 organizations; "Information systems (software)" category (with 8 organizations) and "New Product Development" (with 5) also stand out;
- By business sector: 8 are in the Consulting business; IT (hardware/software) also stands out with 7 benchmark organizations.

Who participated in this research?

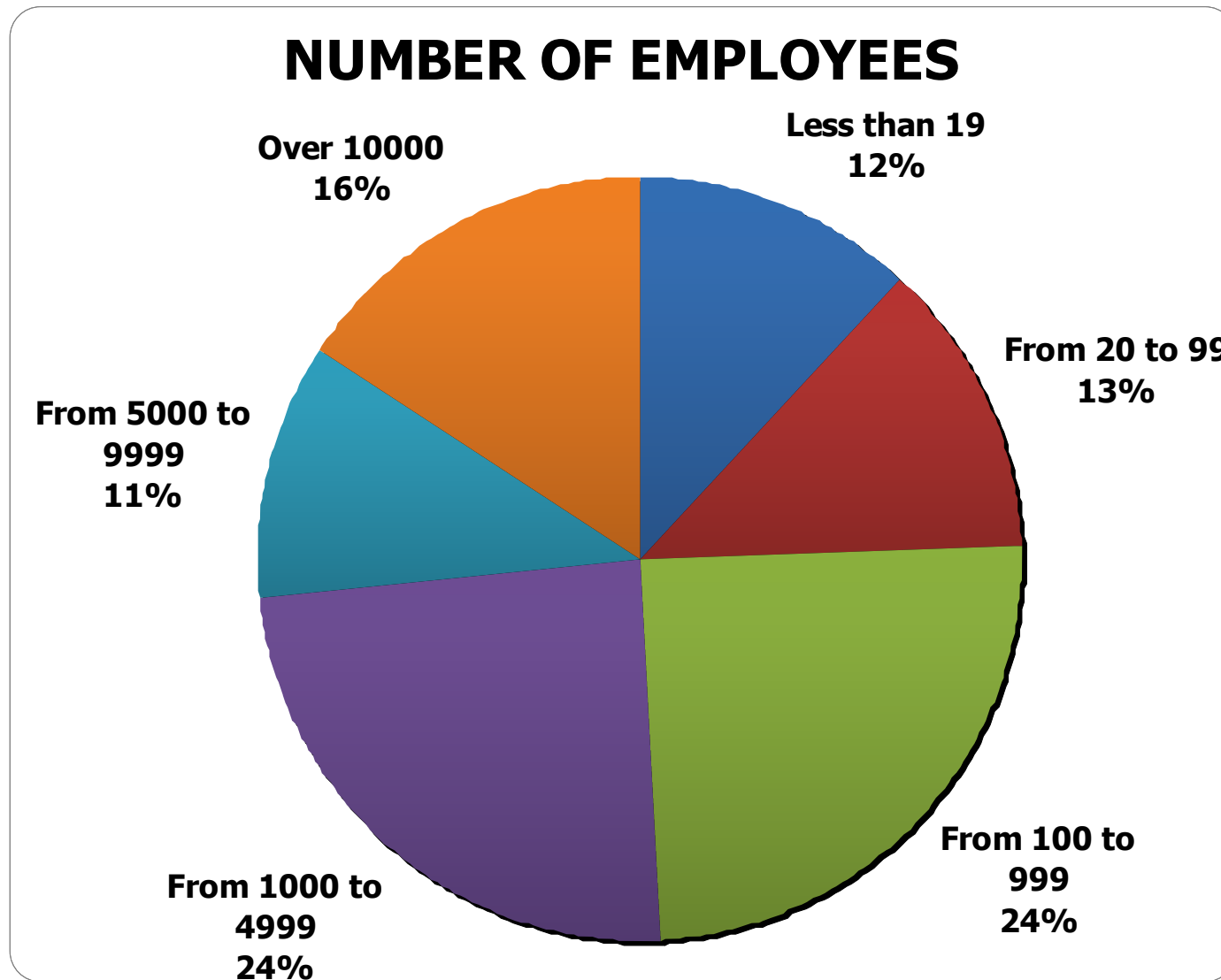


LOCATION (STATE)





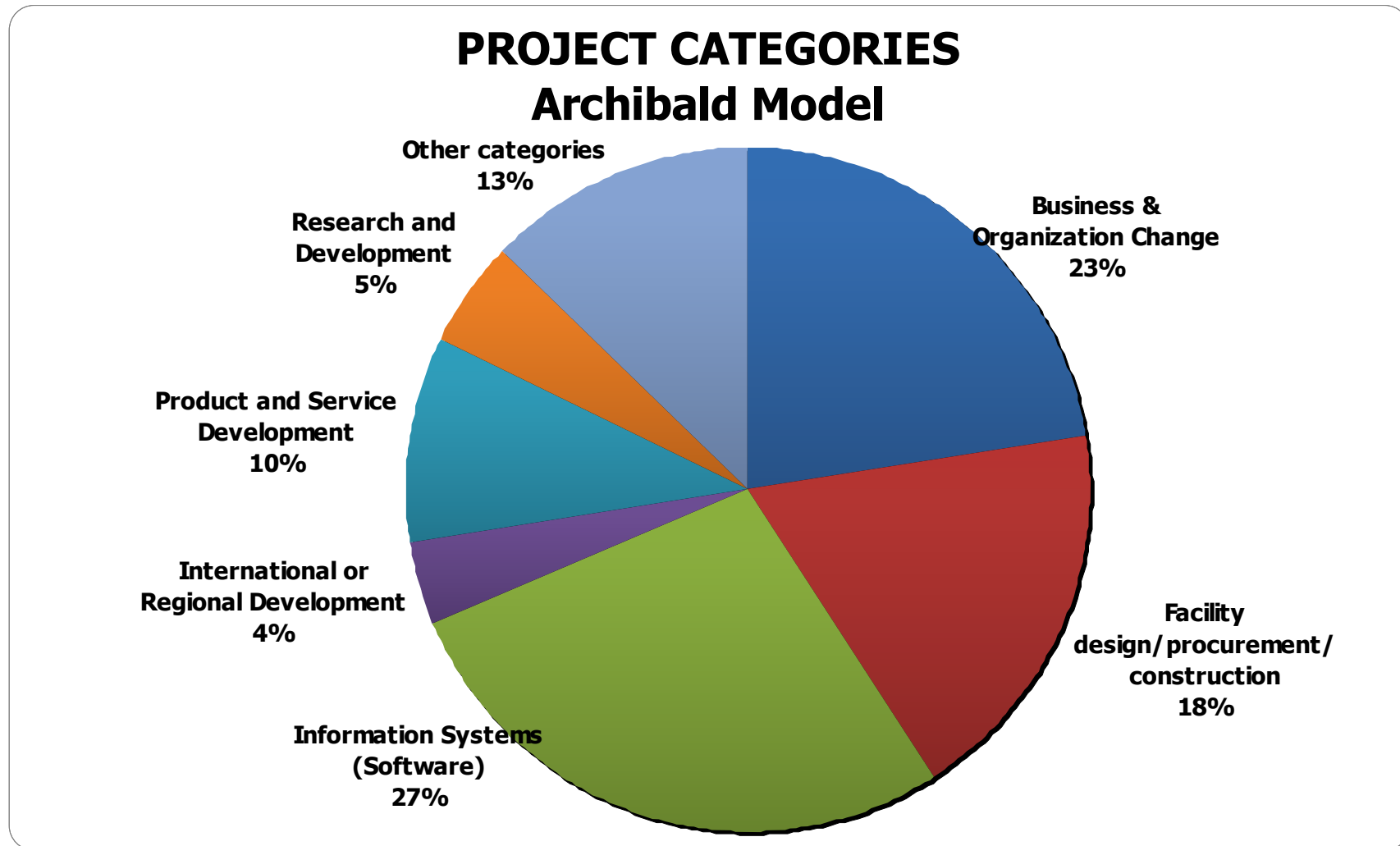
Currency Exchange: US\$ 1 = R\$ 2.30



Category

- 1** Aerospace/Defense Projects
- 2** Business & Organization Change Projects
- 3** Communication Systems Projects (data, voice, image)
- 4** Event Projects
- 5a** Engineering/Architecture Design Projects
- 5b** 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

Source: Russell D. Archibald



Business sectors considered

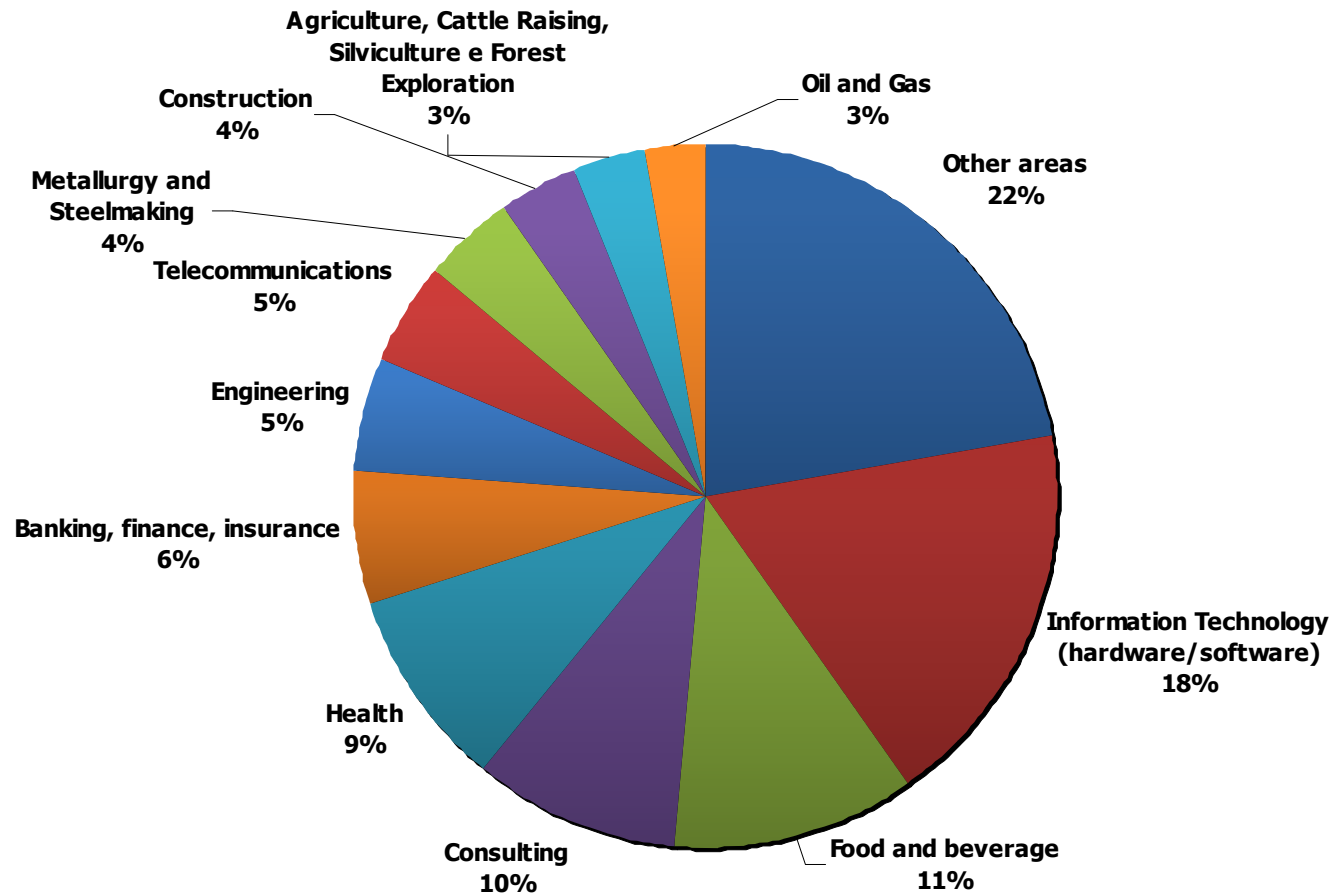
1. Agriculture, Cattle Raising, Silviculture e Forest Exploration
2. Food and beverage
3. Banking, finance and insurance
4. Trading
5. Construction
6. Consulting
7. Defense, Security and Aeronautics
8. Distribution (Water, gas)
9. Education
10. Electronics
11. Engineering
12. Electrical Energy (Production and/or Distribution)
13. Pharmaceutical
14. Mining

Business sectors considered

(cont.)

15. Metallurgy and Steelmaking
16. Paper and Cellulose
17. Oil and Gas
18. Chemical
19. Refractories, Ceramic and Glass
20. Health
21. Information Technology (Hardware & Software)
22. Telecommunications
23. Textile
24. Transportation, Storage & Services, Logistics
25. Tourism & Sports
26. Automotive & Automotive Parts
27. Clothing, Footwear, Fashion and Sports Equipment
28. Other

BUSINESS SECTOR



of participants and maturity, consolidated

ORGANIZATION TYPE	# PARTIC.	AVERAGE MATURITY
Private Sector	220	2.73
Government - Direct Administration	16	2.33
Government - Indirect Administration	41	2.40
Third Sector	33	2.66
Global	310	2.66

ARCHIBALD CATEGORY	# PARTIC.	AVERAGE MATURITY
Defense, security, aerospace	1	
Business & Organization Change	70	2.74
Communication systems (voice, data, image)	5	
Events	0	
Design (engineering, architecture, etc)	7	
Facilities (construction, assembly)	57	2.66
Information Systems (Software)	86	2.65
Regional & International Development	12	2.36
Media, Entertainment	1	
Product and Service Development	30	2.81
Research and Development	15	2.19
Other Categories	26	2.75
Global	310	2.66

of participants and maturity, consolidated

BUSINESS SECTOR	# PARTIC.	AVERAGE MATURITY
Agriculture, Cattle Raising, Silviculture e Forest Explorati	10	2.17
Food and beverage	34	2.81
Banking, finance and insurance	19	2.67
Trading	2	
Construction	11	2.81
Consulting	30	3.12
Defense, Security and Aeronautics	2	
Distribution (Water, gas)	2	
Education	8	
Electronics	2	
Engineering	16	2.59
Electrical Energy (Production and/or Distribution)	8	
Pharmaceutical	1	
Mining	2	
Metallurgy and Steelmaking	13	2.91
Paper and Cellulose	1	
Oil and Gas	9	3.11
Chemical	2	
Refractories, Ceramic and Glass	1	
Health	28	2.45
Information Technology (Hardware & Software)	56	2.79
Telecommunications	15	2.47
Textile	0	
Transportation, Storage & Services, Logistics	2	
Tourism & Sports	1	
Automotive & Automotive Parts	4	
Clothing, Footwear, Fashion and Sports Equipment	2	
Other	29	2.52
TOTAL	310	2.66

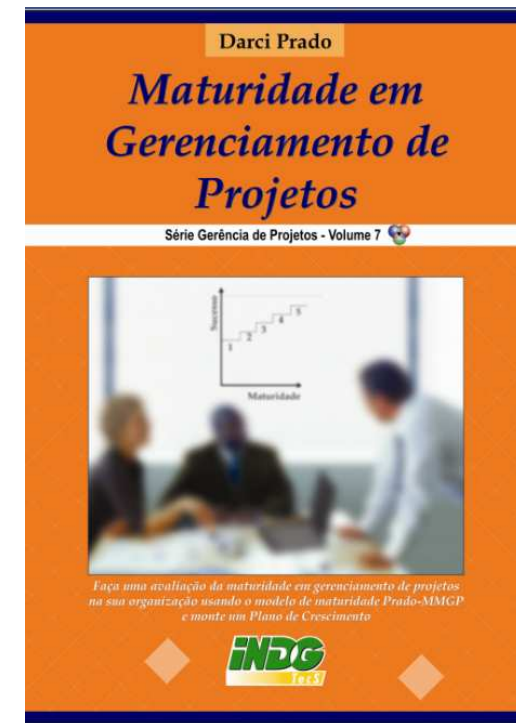
A review of the Prado-PMMM model

What is a maturity model?

- A form of measuring the status of an organization regarding its Project Management skills;
- A way to obtain an improvement plan:
 - After assessing the actual level, it is possible to establish a path to achieve level 5:
 - High success rates;
 - High productivity;
 - High satisfaction and low stress.

Model characteristics

- Developed between 1999 and 2002
 - Based on vast practical experience;
 - Published in December 2002.
- Actual status: Version 1.5
 - Tested in several organizations (see www.maturityresearch.com);
 - Good consolidation level;
 - Refer to the book shown at the right for more information.



Criteria used for conception

- **Utilize the same levels of the SW-CMM model** (1 to 5) developed by Carnegie-Mellon University for software development.
- Be **simple** (questionnaire with 40 questions) and **universal** (able to be applied to every kind of organization and project category).
- Try to relate organizational **maturity** with its **ability to successfully execute projects**.

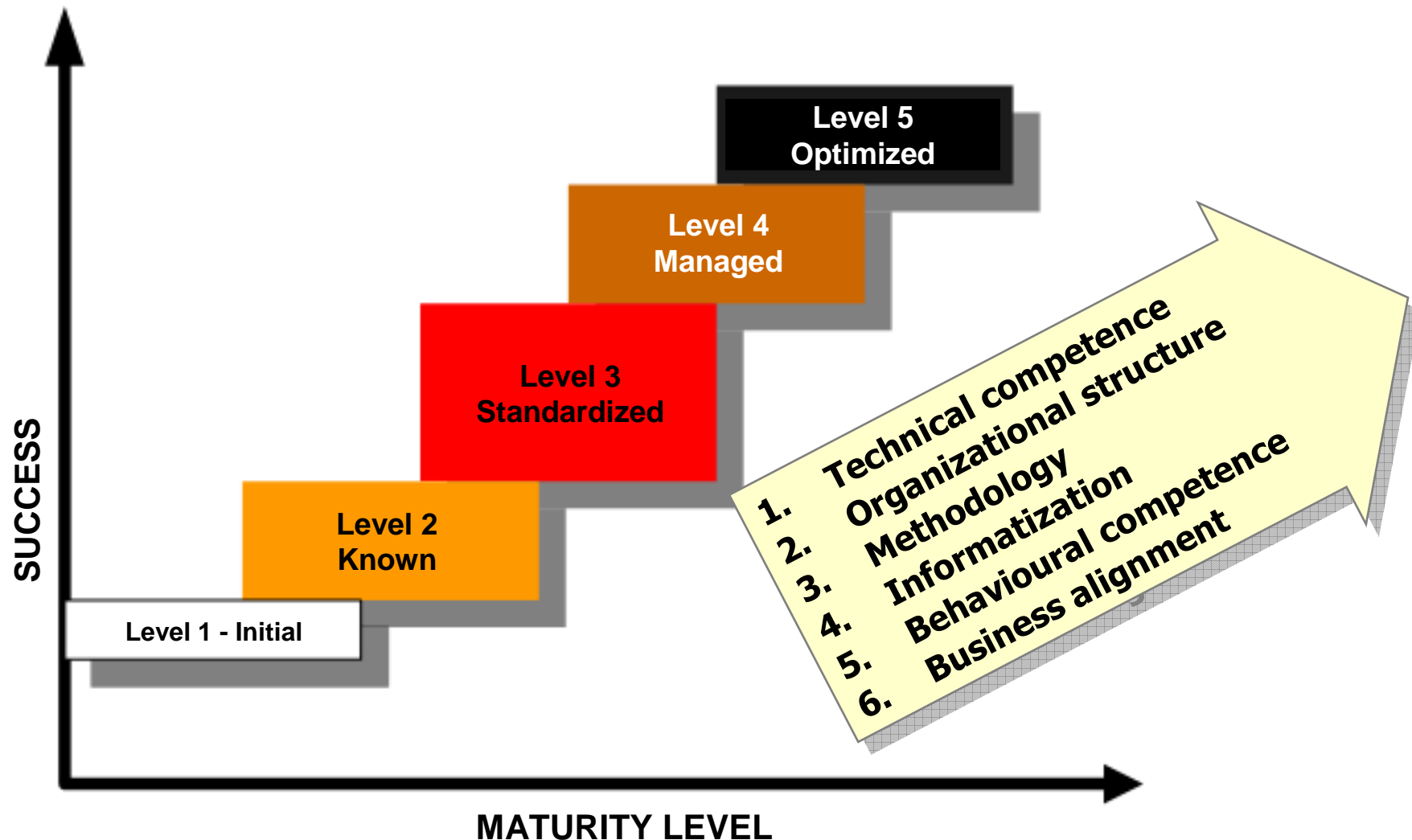
Levels

1. Initial
2. Known
3. Standardized
4. Managed
5. Optimized

Dimensions

1. Technical, context-based competence
2. Use of methodology
3. Informatization
4. Use of adequate organizational structure
5. Alignment with corporate business
6. Behavioural competencies

SECTORIAL PMMM: LEVELS vs. DIMENSIONS



The levels

1) Initial

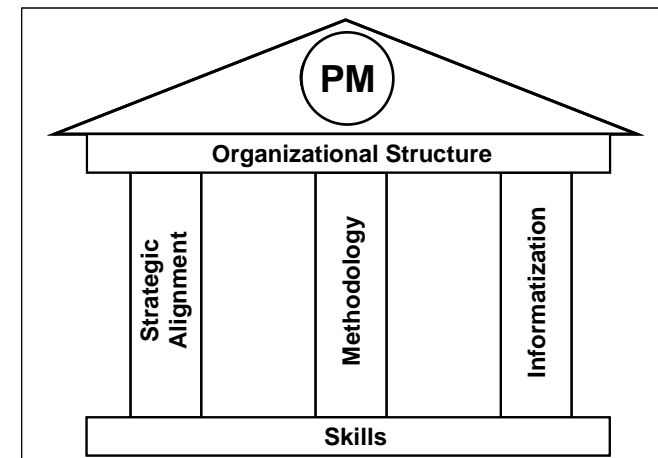
- Low knowledge about the subject
- No methodology or management models
- Projects managed by intuition

2) Known

Beginning of a new culture oriented to skill development

3) Standardized

- Implementation of a standardized Project Management platform:
 - Organizational structure
 - Methodology
 - Informatization
 - Strategic alignment
- Development of competencies



The levels

4) Managed

- Platform enhancements: the standards are working
- Anomalies identified and eliminated
- Efficient human relations
- Consolidated alignment with corporate business

5) Optimized

- Very efficient results (deadlines, scope, quality and costs are optimized)
- Management processes are also very efficient.
- Wisdom
- Low stress
- Low interference
- Somewhat natural

Participants List

Notice: If more than one department of the same company in the same city participated, only one reference to the company is provided in the following list.

NAME	STATE
AACD	SP
AB Brasil	SP
Acumuladores Moura S/A	PE
AD&M Consultoria Empresarial	DF
AGCO do Brasil	RS
AGF Engenharia Ltda	PR
AGRAER	MS
Agrimilk comercio servilos ltda	MG
Air Products Brasil Ltda	SP
Albatroz Serviços Náuticos Ltda.	PE
Allen Rio	RJ
AMANCO Brasil Ltda.	SC
Anglo Engenharia e Participações Ltda	MG
APOLLO SERVIÇOS TÉCNICOS EM ELETRICIDADE LTDA	SP
ASFEB-ASSOC DOS SERV FISCAIS DO ESTADO DA BAHIA	BA
Associação de Assitencia a Criança Deficiente	SP
Atlético Mineiro	MG
att/PS Informática S.A.	RJ
attPS Informática S/A	MG
Attps tech	MG
Avaya Brasil	SP
AVON COSMETICOS LTDA	SP
Banco BBM	RJ
Banco Bonsucesso	MG

NAME	STATE
Banco Carrefour	SP
Banco Central do Brasil	DF
Banco Citibank	SP
Banco do Brasil	DF
Banco do Nordeste do Brasil	CE
Banco Mercantil do brasil	MG
BANESTES - Banco do Estado do Espírito Santo	ES
Batista Associados Ltda	RJ
Bertin S/A	SP
BHS	MG
BMC Software	RJ
BOSS	RJ
Brasil Telecom SA	DF
BRASILENCORP - Engenharia, Meio Ambiente e Gestão Corporativa	PE
Brasmáquinas	BA
CAIXA ECONOMICA FEDERAL	DF
Carillo Consultoria Ltda.	SP
CCPRMG - Itambé	MG
Central Nacional Unimed	SP
CENTRO DAS INDÚSTRIAS DO ESTADO DO RIO GRANDE DO SUL	RS
Centro de desenvolvimento de Sistemas	DF
Chemtech	MG
Cia Júnior Consultoria	BA
Cleamar Engenharia LTDA.	SC

NAME	STATE
Clênio Senra Gestão de Empreendimentos Ltda.	MG
C-Link Consultoria Ltda	SP
COMLURB	RJ
companhia hidro eletrica do sao francisco	PE
Companhia Paranaense de Energia - COPEL	PR
Companhia Siderurgica Paulista - COSIPA	SP
Compass International	RJ
Compasso Tecnologia Ltda	RS
Confidencial	SP
Consciência Soluções e Tecnologia	SP
Consorcio AG-MJ-KTY	MG
Consorcio Conpar	PR
CONSTRUCAP CCPS ENG. E COM S.A.	SP
Construtora Andrade Gutierrez SA	SP
CONSTRUTORA NORBERTO ODEBRECHT S.A.	PE
CONVERGYS IMG DO BRASIL	SP
COPEL - Companhia Paranaense de Energia	PR
COSANPA - Companhia de Saneamento do Pará	PA
COSIPA	SP
CPM Braxis	BA
D.A.S.B.	SP
Dataprev	PB
Datasul ECM	SC
DELP Engenharia MEcancia Ltda	MG

NAME	STATE
Departamento de Obras Públicas de Estado de MG	MG
DER/MG	MG
Det Norske Veritas	RJ
Devemada Engenharia Ltda.	SP
Ecoplan Engenharia Ltda	SE
Egen consultoria para informática Ltda	PB
Elevadores Atlas Schindler SA	SP
ELFUSA GERAL DE ELETROFUSÃO LTDA	SP
EMATER-MG	MG
Embraer S.A.	SP
Empresa Y	BA
Ênfase Instituto Jurídico	RJ
Engellog - Centro de Engenharia Ltda.	SP
ESAB	MG
Escritório Central de Arrecadação e Distribuição - ECAD	RJ
ESMALTEC S/A	CE
Estrategia Rural	PI
Ética Assessoria Técnica	SC
Ética Soluções Integrais	MG
EUAX GESTÃO DE PROJETOS	PR
Faculdade de Ciências e Tecnologia - FTC	BA
FCAP Jr. Consultoria	PE
FECOMÉRCIO-RJ - Federação do Comércio de Bens, Serviços e Turismo de RJ	RJ
FGV Projetos	SP

NAME	STATE
FIRJAN	RJ
Fischer S/A Com. Ind. e Agricultura	SP
FMC Technologies	RJ
Fundação Desembargador Paulo Feitoza - FPF	AM
Fundação Hemominas	MG
Fundação Lemann e Ismart	SP
Fundação Movimento OndAzul	RJ
Geoexplore (A Coffey Mining Co.)	MG
Gerdau	RS
GERDAU AÇOMINAS S/A	MG
GERDAU AÇOS LONGOS	SP
Global Village Telecom	RS
Golden Cross	RJ
Gorges Tecnologia e Conhecimento em Informática Ltda.	RJ
Grendene SA	RS
Grupo Conectt S/A	SP
Hermes S.A.	RJ
Hewlett Packard Company	RS
Hosp. Alemão Oswaldo Cruz	SP
Hospital Abreu Sodré	SP
HSBC Banco Multiplo	PR
IBM	SP
iFOCUS Technologies	SP
IMA - Instituto Mineiro de Agropecuária	MG

NAME	STATE
iMaque	SP
INDG	MG
InfoChoice	MG
Infoglobo Comunicações S.A	RJ
Inst. de Pesquisas Jardim Botânico do Rio de Janeiro	RJ
Instituto Centro-Oeste de Desenvolvimento de Software	GO
Instituto de Desenvolvimento Agropecuário e Florestal Sustentável do Amazonas - IDAM	AM
Instituto de Engenharia Biomédica - IEB-UFSC	SC
INTERTECHNE CONSULTORES S.A.	PR
ISA CTEEP	SP
ITAIPU Binacional	PR
JavaFuturo - Tecnologia da Informação	GO
JR Consultoria	PR
Klabin S/A	PR
LG INFORMATICA LTDA	GO
LIGHT SERVIÇOS DE ELETRICIDADE SA	RJ
Mafra e Magalhães,Arquitetura e Saúde Ltda	MG
MAHLE Metal Leve SA	SP
Máquinas Agrícolas Jacto S.A.	SP
MATERA Systems	SP
Medial Saúde	SP
Merck Sharp & Dohme	SP
Minerconsult Engenharia Ltda	MG
Modular Mining Systems	PE

NAME	STATE
Mondu	DF
MOORE STEPHENS TRIXX CONSULTORES ASSOCIADOS	PR
MSA INFOR	MG
N&A CONSULTORES	BA
Nansen S/A Instrumentos de Precisão	MG
Net Serviços de Comunicação S/A	SP
Netcenter Informatica	RJ
Nortel	SP
Novelis do Brasil Ltda.	MG
NRsystem Com. Serv. de Informáticz	SP
Oi	MG
Oi	RJ
Oi	CE
Omnisys	SP
ORIZON DO BRASIL	SP
Otimiza Consultoria em Administração Ltda	RS
P. Kuperstein & Cia Ltda	PR
Pentagrama Consultoria e Sistemas	MG
Peopleware Tecnologia	RJ
Pesqueira Maguary	CE
Petrobras	RJ
PETROBRAS	ES
Petrobras	MG
PETROBRAS DISTRIBUIDORA S.A.	RJ

NAME	STATE
Petrobras (Dinsmore Associates)	RJ
Petroflex Ind. e Com. S.A.	RJ
Petróleo Brasileiro SA - UN REVAP- Engenharia	SP
Pix	RJ
PM Tech	RS
PMO (PNAFM) - Prefeitura Municipal de Belo Horizonte	MG
PMO Master - Escritório de Projetos	RJ
PMQM-Gerenciamento de Projetos e Métodos Quantitativos	MG
Prime Systems	MG
Procergs	RS
PROCERGS	RS
Prodeb - Cia de Processamento de Dados do Estado da Bahia	BA
PRODEMGE	MG
Prodemge	MG
Produção Júnior Consultoria e Assessoria	MG
Profissional Liberal	RJ
Projectum Gestão de Projetos em Tecnologia da Informação	SP
Prosperi Tencnologia	ES
Randon Implementos para o transporte	SP
Rodobens Corporativa S/A	SP
Sadia	PR
Sadia	SC
SADIA	MT
Sadia S/A	SP

NAME	STATE
SAEB	BA
Salsifi Consulting Ltda	ES
SBIBAE	SP
SDIAS CONSULTORIA LTDA.	RJ
SEA Tecnologia	DF
SEBRAE	SC
Sebrae	RS
SECRETARIA DE ESTADO DA AGRICULTURA E DO DESENVOLVIMENTO AGRÁRIO	AL
SECRETARIA DE ESTADO DA CASA CIVIL - EGP-RIO	RJ
Secretaria de Estado de Governo	MG
Secretaria de Estado de Transportes e Obras Públicas	MG
Secretaria de Planejamento e Desenvolvimento Econômico - Governo do Amazonas	AM
Secretaria do Planejamento e Gestão	RS
SENAC - Serviço Nacional de Aprendizagem Comercial/RS	RS
Serasa	SP
SergipeTec - Sergipe Parque Tecnológico	SE
SERPRO	MG
SERPRO	PE
SERPRO - Serviço Federal de Processamento de Dados	DF
Serviço Nacional de Aprendizagem Industrial - SENAI-ES	ES
SETOP	MG
SHV Gas Brasil	RJ
Siemens	SP
Sociedade Nordestina de Ecologia/Instituto de Ensino Superior	PE
Solution Software Ltda	MG

NAME	STATE
Souza Cruz - a British American Tobacco Company	RJ
Stefanini IT Solutions	RJ
SWB Soluções Integradas Ltda	MG
Sygma Tecnologia Eng. Ind. e Com. Ltda	SP
Synchro	RJ
Techbiz	MG
Telefonica S/A	SP
TEPLASTIL INDUSTRIA DED PRODUTOS PLASTICOS LTDA	CE
TIM BRASIL SA	RJ
Top Quality Desenvolvimento Empresarial Ltda.	RJ
TOTVS	SP
Track & Field	SP
Tractebel Energia	SC
Tribunal de Contas dos Municípios do Ceará	CE
Tribunal Regional Eleitoral de Minas Gerais	MG
UFMG Consultoria Jr.	MG
Unibacen	DF
Unimed João Monlevade Cooperativa de Trabalho Médico Ltda	MG
Universidade de Fortaleza	CE
Universidade Fumec	MG
UPE Consultoria Jr.	PE
Uppercase Consultoria	SP
V & M do Brasil	MG
Vale	ES
Vick Máquinas	SC
Visual Systems Informática Ltda	SP
Voith-Mont Ltda	SP
Volkswagen Commercial Vehicles	RJ
Volkswagen of Brazil	SP
WEG Automação S/A.	SC
WGM Sistemas	SP
Wilson Sons Agência Marítima Ltda.	RJ
WP2 TECNOLOGIA	RJ

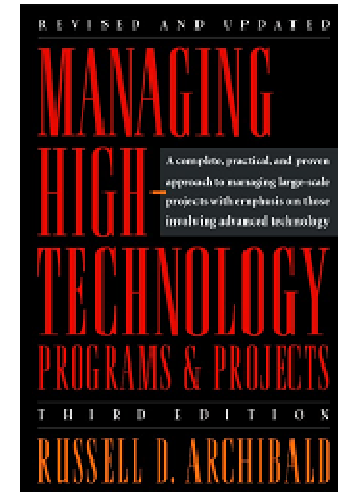
The team who developed this work

Authors – Team Leaders



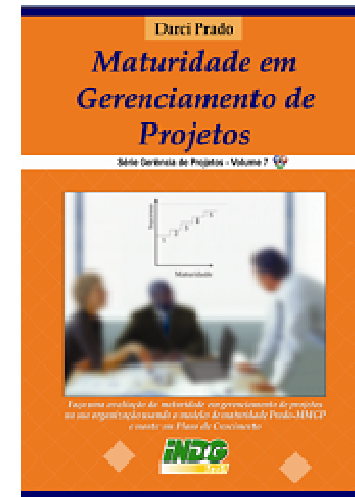
Russel D. Archibald

- MSC, PhD
- PMP, IPMA
- One of the founders of PMI-USA
- Consults for companies all over the world
- Listed on “Who is Who”



Darci Prado

- IPMA – Level B
- One of the founders of PMI-MG, PMI-PR and IPMA Club-BH
- Associate Consultant for INDG



COMMITTEE

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

Coordination: Marcus Vinicius Marques

Team: Marcus Vinicius Marques, Fernando Ladeira, Carlos Eduardo Andrade and José Carlos Tinoco

SUMMARY REPORT

Coordination: Darci Prado

Team: Darci Prado, Marcus Vinicius Marques, Fernando Ladeira, Warlei Oliveira, Carlos Eduardo Andrade and José Carlos Tinoco

COMPLETE REPORT

Coordination: Darci Prado

Team to be defined

- Support:



- Promotion:

- Organizations, Unions and Associations:

- Chapters PMI: 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

- Postgraduation courses

- FGV, FUNDAÇÃO DOM CABRAL, IETEC

THE END