



# National and Global Challenges: An Agenda for Innovation

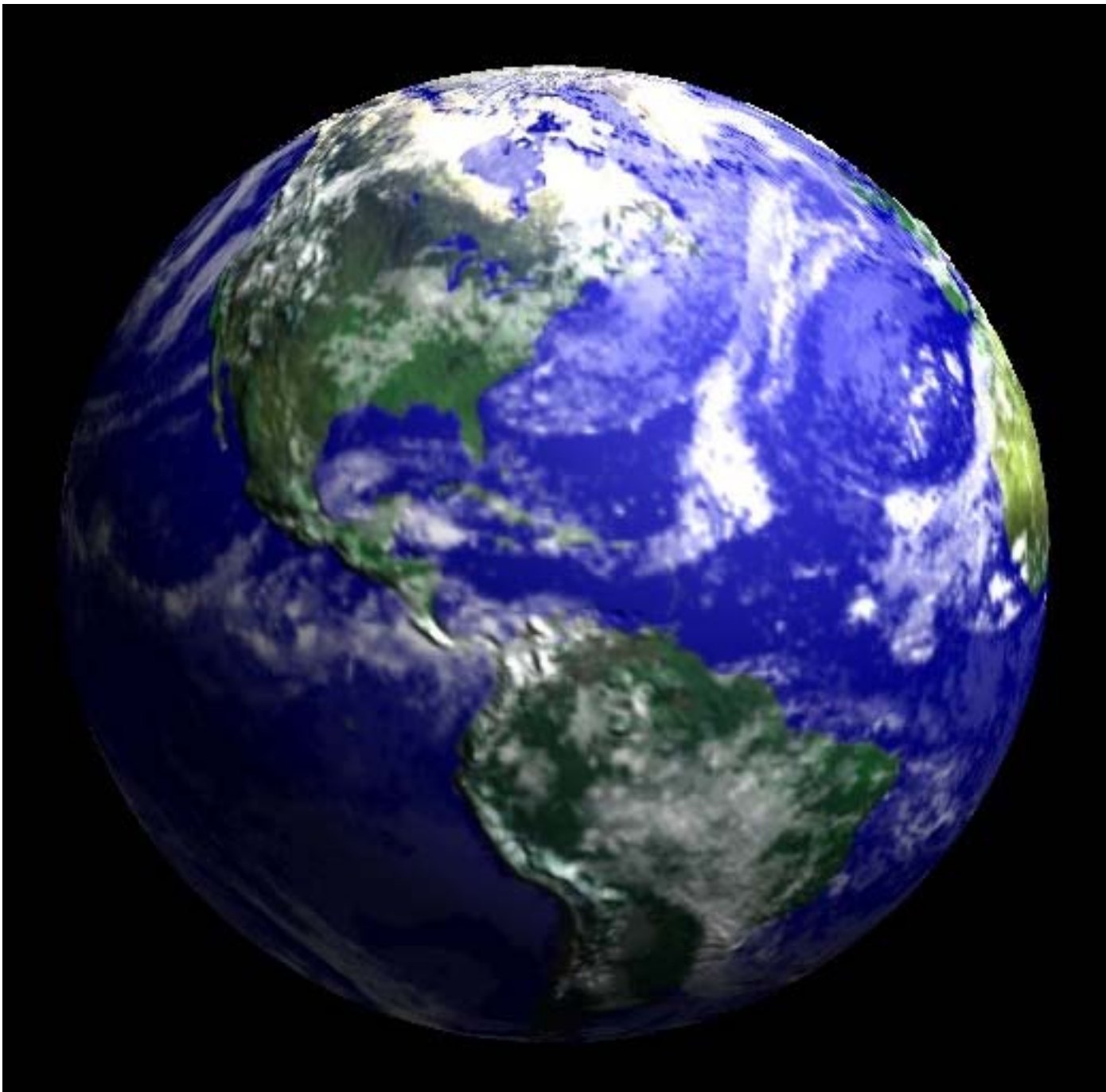
**GA Plonski**

23.11.2011



gettyimages<sup>®</sup>





# 8 JEITOS DE MUDAR O MUNDO

NÓS  
PODEMOS



UNESCO Report (2006):

*Nanotechnologies may enable **five** of the eight Millennium Goals*



**RIO+20**

**United Nations  
Conference on  
Sustainable  
Development**

*Innovation and sustainability*





# Governance of Innovation Systems

VOLUME 1: SYNTHESIS REPORT

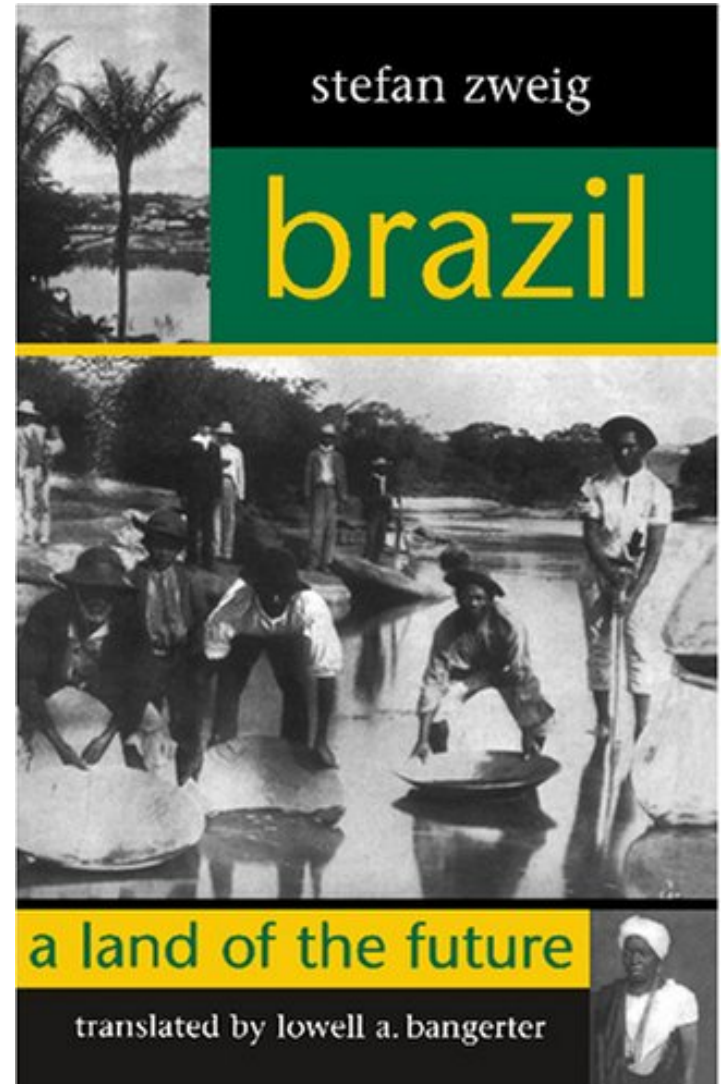


Policies ~~for~~ through innovation

Políticas ~~para~~ pela inovação







The  
Economist

NOVEMBER 14TH - 20TH 2009

Economist.com

The decline of music piracy  
Nigeria gets better  
Farmers v greens in America  
How drugs are being decriminalised  
Bland bosses

# Brazil takes off



A 14-PAGE SPECIAL REPORT  
ON LATIN AMERICA'S BIG SUCCESS STORY



Algeria... 63.50  
Argentina... 63.50  
Australia... 63.50  
Austria... 63.50  
Belgium... 63.50  
Brazil... 63.50  
Canada... 63.50  
China... 63.50  
Denmark... 63.50  
France... 63.50  
Germany... 63.50  
Greece... 63.50  
Hong Kong... 63.50  
India... 63.50  
Indonesia... 63.50  
Italy... 63.50  
Japan... 63.50  
Korea... 63.50  
Latin America... 63.50  
Mexico... 63.50  
Middle East... 63.50  
Nigeria... 63.50  
North America... 63.50  
Pakistan... 63.50  
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Spain... 63.50  
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Switzerland... 63.50  
Taiwan... 63.50  
Tanzania... 63.50  
Turkey... 63.50  
USA... 63.50  
UK... 63.50  
Vietnam... 63.50

NOVEMBER 14TH - 20TH 2009

Worldwide cover

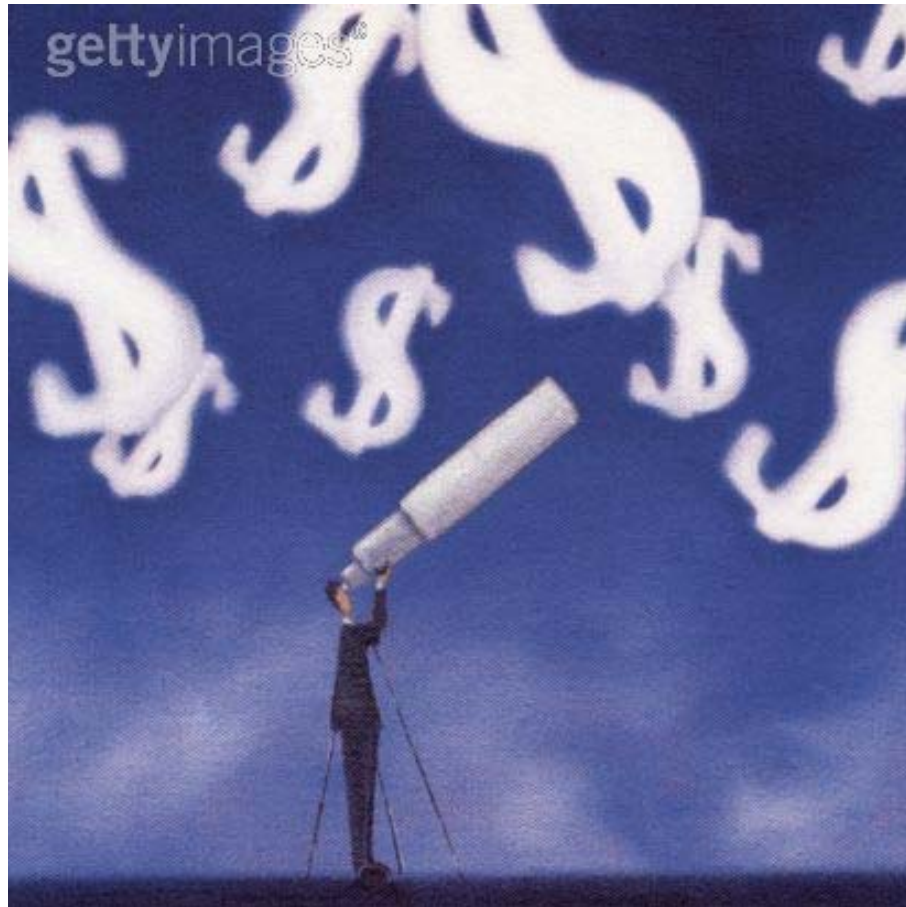
Brazil is a creative nation; is it also innovative?





# Innovation rate: 38%, but...

PINTEC/IBGE 2008 (OECD alike)







PETROBRAS





## EMPRESAS

	<b>36</b> Aché (SP)		<b>98</b> Nuteral (CE)
	<b>40</b> Adespec (SP)		<b>102</b> Nutrimental (PR)
	<b>42</b> Alunorte (PA)		<b>104</b> Ouro Fino (SP)
	<b>44</b> Bematech (PR)		<b>106</b> Oxiteno (SP)
	<b>48</b> Biommm (MG)		<b>108</b> PCtel (GO)
	<b>50</b> Bosch (SP)		<b>110</b> Pele Nova (MS)
	<b>54</b> Brapenta (SP)		<b>114</b> Petrobras (RJ)
	<b>56</b> Brasilsat (PR)		<b>120</b> Pharmakos (AM)
	<b>58</b> Braskem (SP)		<b>122</b> Pipeway (RJ)
	<b>62</b> Caliman (ES)		<b>124</b> Polymar (CE)
	<b>64</b> Embraco (SC)		<b>126</b> Projeto Pacu (MS)
	<b>68</b> Embraer (SP)		<b>132</b> Randon (RS)
	<b>74</b> Fertibom (SP)		<b>135</b> Sabó (SP)
	<b>76</b> Griaule (SP)		<b>138</b> Schulz (SC)
	<b>78</b> Lupatech (RS)		<b>140</b> Siemens (SP)
	<b>82</b> Marcopolo (RS)		<b>144</b> Simas (RN)
	<b>86</b> Mecat (GO)		<b>146</b> Tigre (SC)
	<b>88</b> Miolo (RS)		<b>150</b> TMED (PE)
	<b>92</b> Módulo Security (RJ)		<b>152</b> Troller (CE)
	<b>94</b> Natura (SP)		<b>156</b> WEG (SC)



**BEMATECH**  
Faturamento  
**R\$ 350 MILHÕES**  
Principal atividade  
Sistemas de automação  
para o varejo  
Onde foi incubada  
Incubadora Tecnológica  
de Curitiba (Intec)  
Tempo que passou  
em uma incubadora  
2,5 anos

“O contato com os pesquisadores foi fundamental para alavancar os negócios”

WOLNEY BETIOL,  
cofundador da Bematech





**ADESPEC**  
Faturamento  
**R\$ 12 MILHÕES**



Principal atividade  
*Fabricação de adesivos  
sem solvente*



Onde foi incubada  
*Centro de Inovação,  
Empreendedorismo e  
Tecnologia (Cietec)*



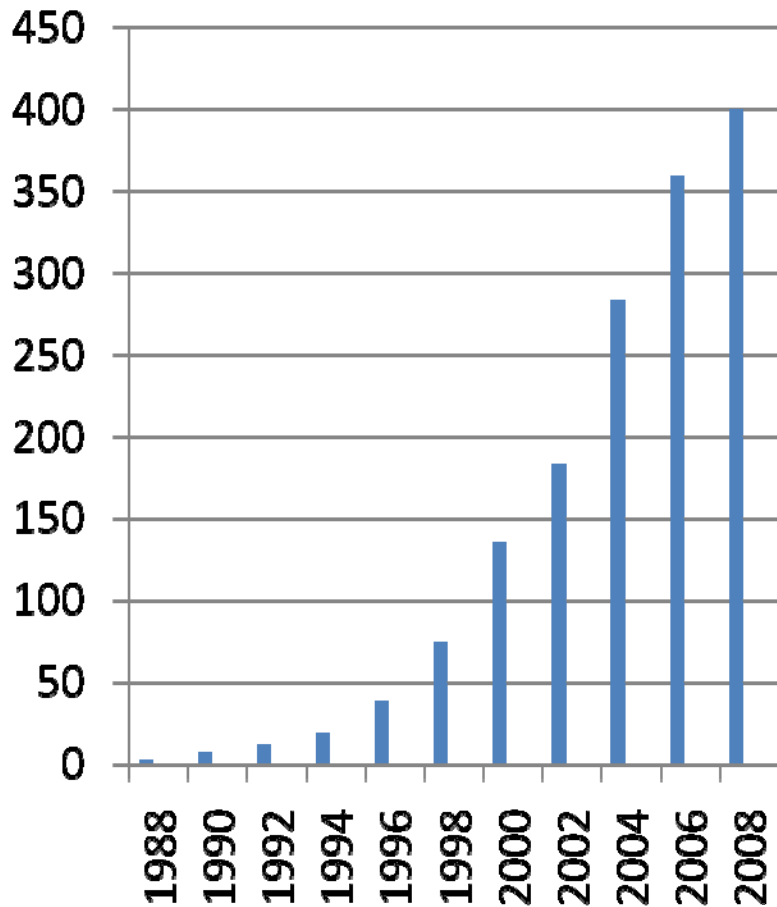
Tempo que passou  
em uma incubadora  
**3 anos**

**WANG SHU CHEN:** ➔

com apoio de incubadora,  
montou laboratório  
tão equipado como o de  
uma multinacional



# Business incubators – aggregate profile



- ✓ 8k start-ups
- ✓ Revenue: 2.4 MM US\$/year



- ✓ 40k jobs (mostly qualified)
- ✓ Each US\$ 1 taxpayers money invested generates US\$ 0.9/year in taxes



ANPROTEC®

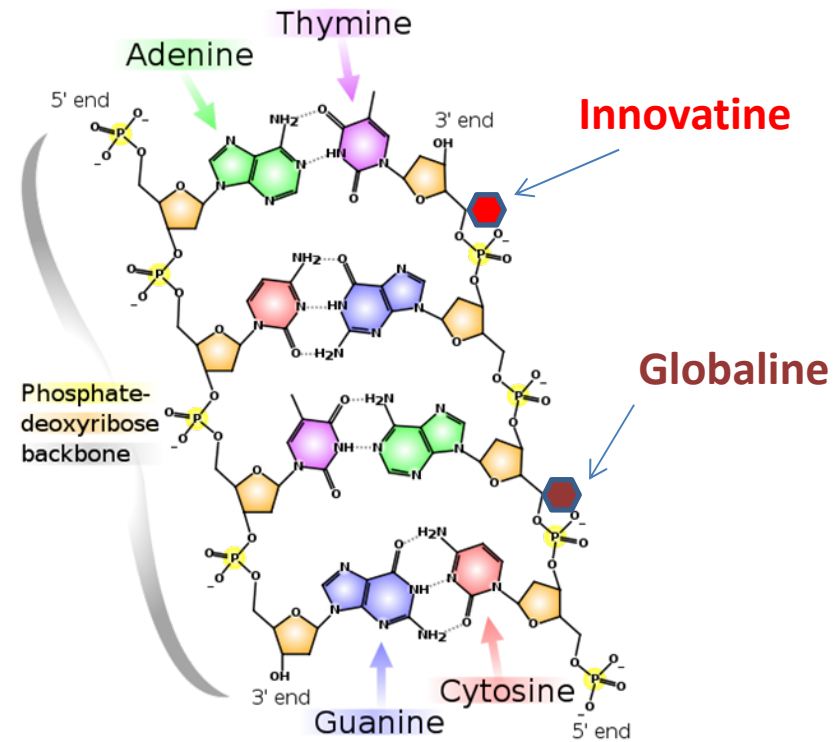
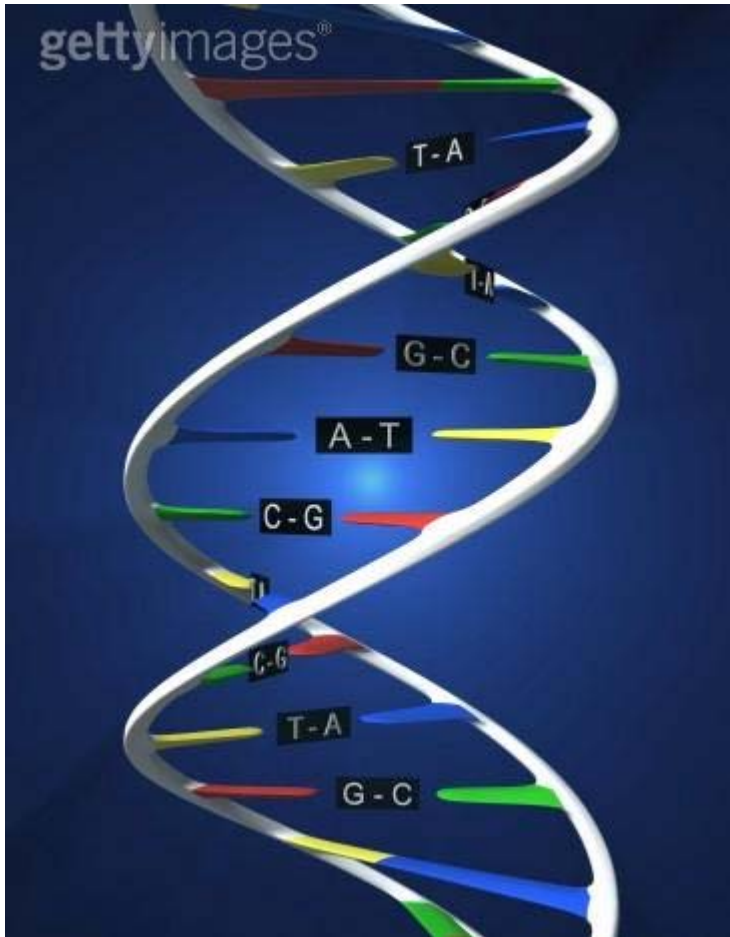


*Cerne*

Centro de Referência para  
Apoio a Novos Empreendimentos



# A new generation of businesspersons



# “THE GLOBAL ECONOMY'S LATEST WEAPON: THE MEGA RESEARCH PARK”



**Business Week, Special Report, 01.06.2009**

[http://www.businessweek.com/innovate/di\\_special/20090601research\\_parks.htm](http://www.businessweek.com/innovate/di_special/20090601research_parks.htm)

# Porto Digital – *drivers*

- ✓ Reduce brain drain  
(reason: periphery)
- ✓ Generate new IT  
business models
- ✓ Modernize mature  
industry clusters
- ✓ Renew a downgraded  
historical borough



In 11 years: 3.5% of the State GDP



may 2010

INSME Rio 2010

universidade federal do rio de janeiro

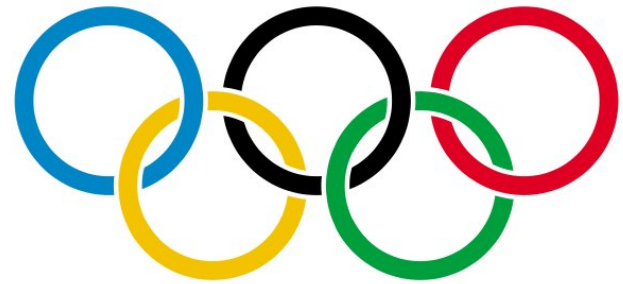
## Rio Technology Park





# Rio Technology Park - *drivers*

- ✓ Promote the use of university developed technologies
- ✓ Stimulate an entrepreneurial attitude among students (e.g. *Sebrae Challenge*)
- ✓ Attract R&D Centres  
(leveraging the neighbouring Petrobras Mega R&D Centre)





# SILICON ISLAND

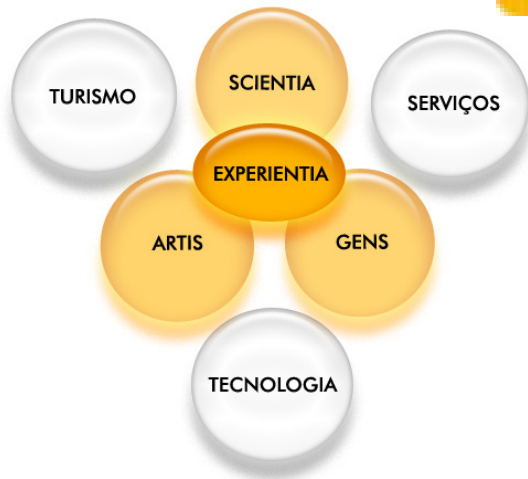


# Alfa Technology Park – *drivers*

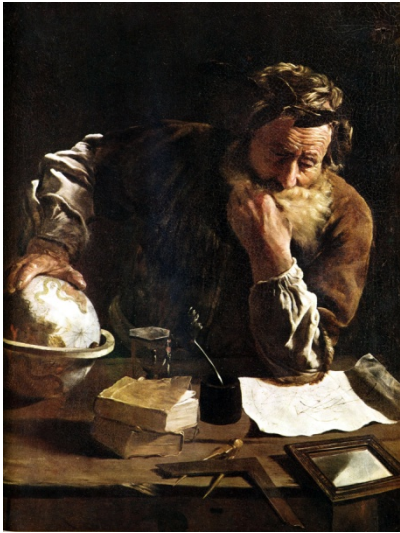
- ✓ Reduce brain drain (reason: environment)
- ✓ Create a new model of an innovative region
- ✓ New city economy: *beauty & brains*



In 20 years: City GDP from SW is 2x tourism







*“Give me a lever long enough and a fulcrum on which to place it, and I shall move the world”*

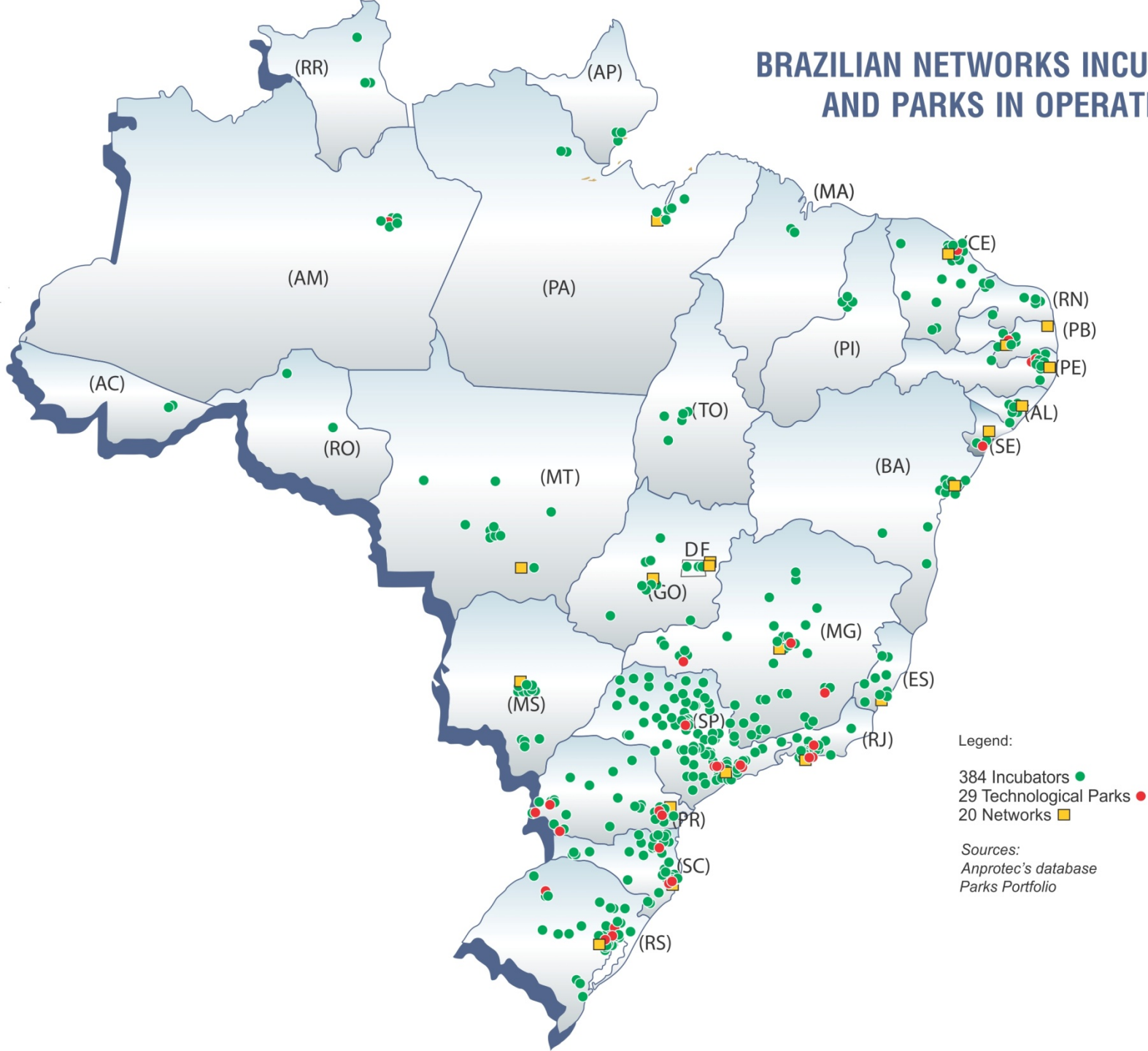
~260 BCE





Where can a region hold on  
to retain its talents  
and leverage its competitiveness  
through innovation?

# BRAZILIAN NETWORKS INCUBATORS AND PARKS IN OPERATION

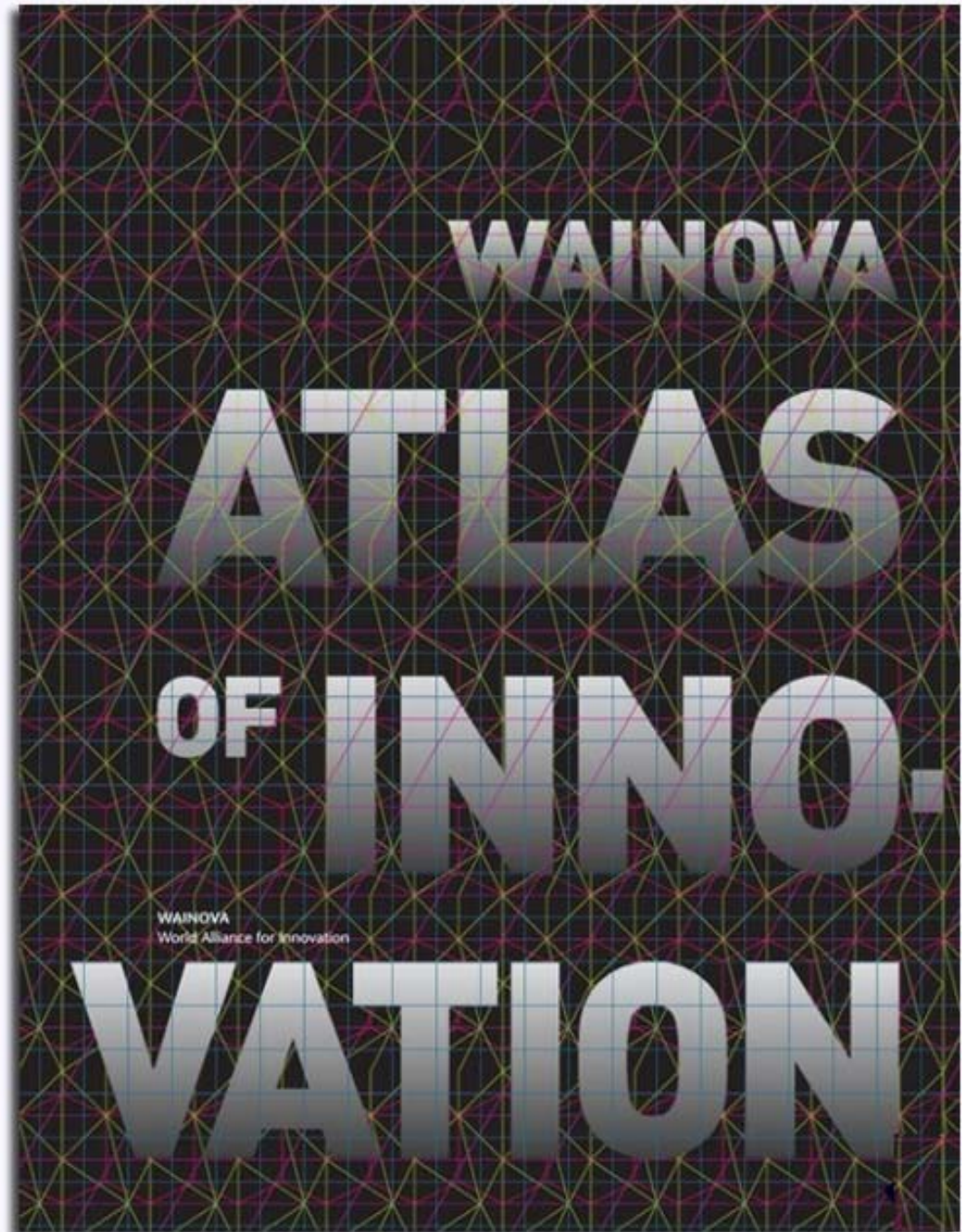




**WAINOVA**

World Alliance for Innovation

[www.wainova.org/ebook/index.html](http://www.wainova.org/ebook/index.html)



*Let´s keep in touch*

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