

Sharing Best Practices in R&D Statistics

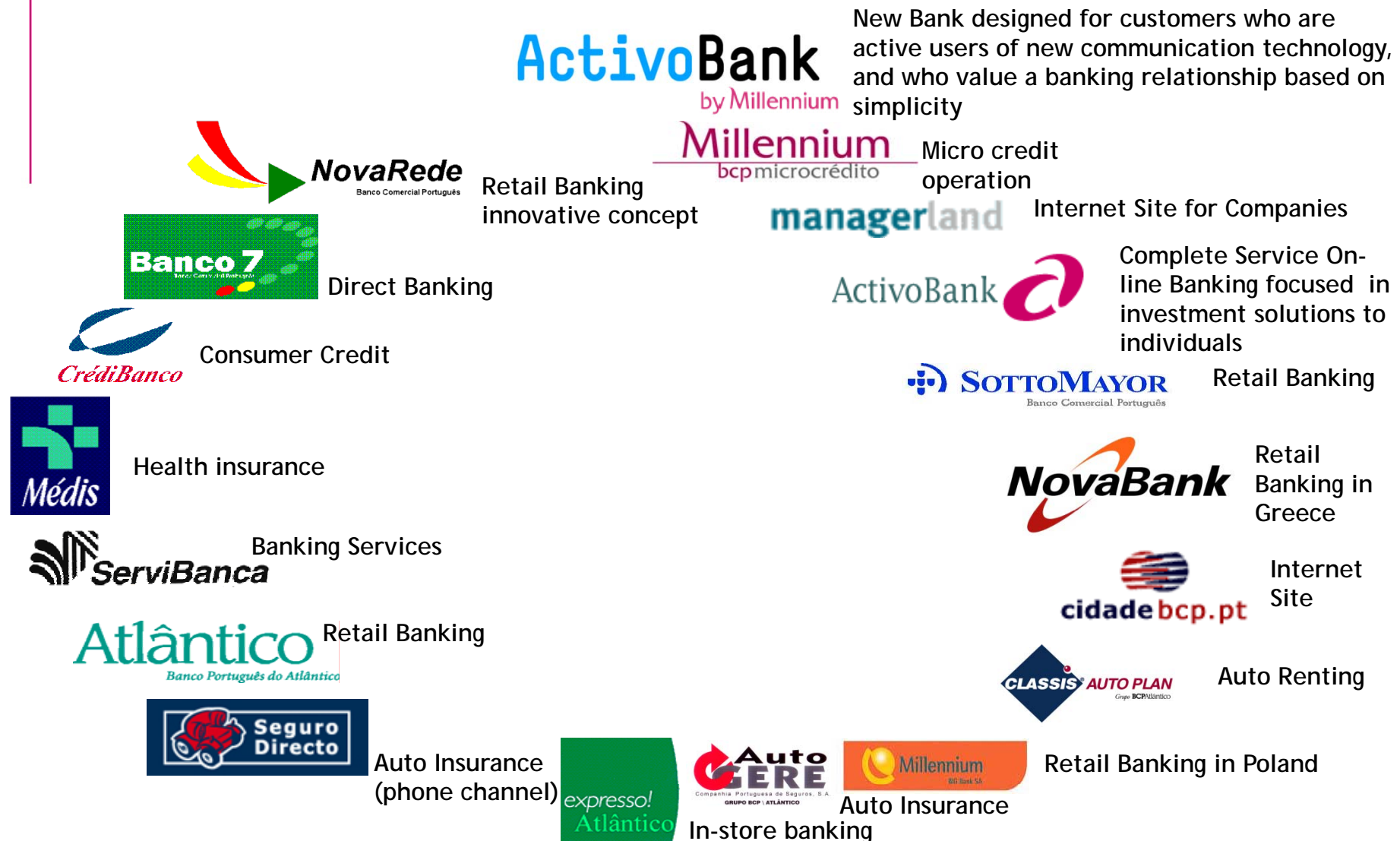
Challenges in knowledge intensive services

II International Workshop

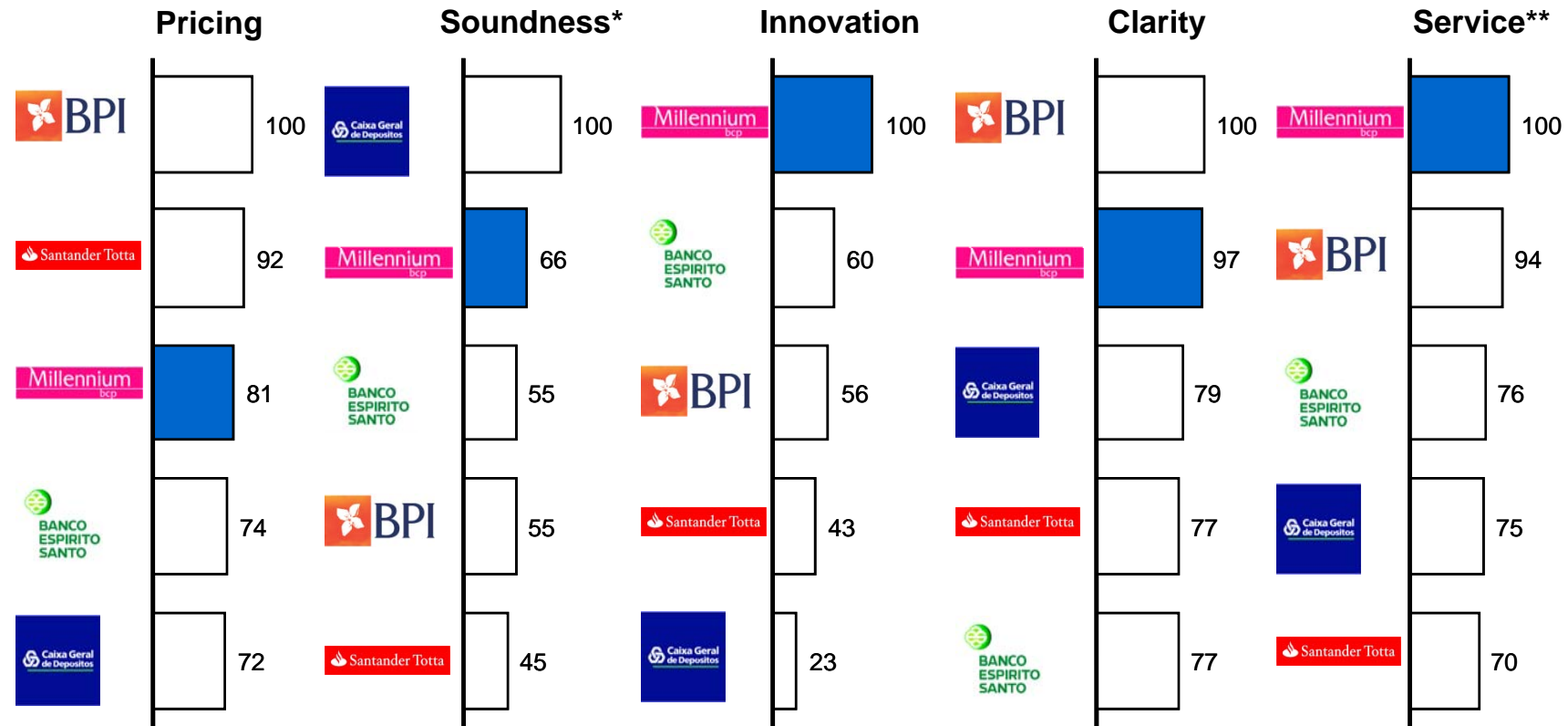


29 June 2010

Millennium bcp has a strong tradition in innovation



Millennium bcp is recognized as a leader in innovation



* Average of factors soundness and trust

** Average of factors efficiency and service

Note: Index based on answers to "why did you chose the bank?", adjusted by customers' market share

Focus on Innovation

Why Innovation?

- ❑ Millennium bcp has a strong tradition of innovation
- ❑ Millennium bcp is recognized as a leader in innovation
- ❑ The innovation capability of Millennium bcp is distinctive from their competitors
- ❑ Innovation leverages the commercial and customer service capabilities

Regaining
innovation
as the main differentiating
factor and excellence to
be a leader in Customer
Service

Innovation in what?

- ❑ In financial offer (savings and credit solutions), following a path of simplicity and transparency
- ❑ In the service and model of interaction with customers (including channels of contact)
- ❑ In image and communication (media and content)
- ❑ In the internal processes and operations, including management of people and talent

R&D activities at Millennium bcp: Departments/Units

- Millennium bcp does not have a R&D Department.
R&D activities are decentralised and transversal to the Bank.
- Several Departments/Units develop R&D activities:
 - ✓ Marketing Departments (Individuals and Companies);
 - ✓ Direct Banking Department;
 - ✓ IT Department;
 - ✓ Operations Department;
 - ✓ Risk Office;
 - ✓ " One Thousand Ideas";
 - ✓ Foreign Business Support Unit;
 - ✓ Strategic Project Teams;
 - ✓ Information Management Unit.

R&D activities at Millennium bcp: Type of activities

- Type of R&D activities:

- ✓ Development of techniques for investigating consumer behaviour for the purpose of creating new types of products and banking services: savings accounts and credit products;
- ✓ Research related to new or significantly improved financial services (new concepts for accounts, loans, insurance and saving instruments);
- ✓ Studies with the aim of restructuring processes, activities, business units;
- ✓ Studies with the aim of creating new business units or even new Banks (has was the case recently with the revamp of ActivoBank - leverage on the innovative image of ActivoBank) including the launch of pilot stores;
- ✓ Mathematical research relating to financial risk analysis;
- ✓ Development of risk models for credit policy;
- ✓ Development of new software for home banking and of support to commercial activity (e.g. iPAC);
- ✓ Research related to electronic banking, Internet-related services and e-commerce applications;
- ✓ Team building with the aim of studying measures to be implemented of profitability and efficiency enhancement.

Example #1: R&D initiatives in the Operations Department

Project	Description	FTE
New consumer loans process	Development of a new validation and funding process for Consumer Loans. New credit applications will be scanned in branches, allowing the Operations department to validate and execute the funding with the use of images only	2
Cheques decentralized scanning	Development of a new operational process to handle just cheques' images instead of their traditional physical format (cheques' images are used for financial clearing)	2
Integrated treasury solution for Business customers	An equipment-based solution that allows business customers to deposit cheques, banknotes and coins in their own facilities	1
Digital Archive	Development of a new back-office archiving process, based on image capturing and referencing, that eliminates the archive of non-legal paper documents	4
POD - Operations Department's Operating Platform	Extension of POD back-office services, exclusively based on processes' images, including the support of business accounts (opening) and clients' signatures archiving	2

Example #2: ActivoBank - a new banking concept



Why the need for a new banking services concept?

Who are the new individual Banking Customers

- ✓ *Self-directed*, that value simplicity when acquiring and servicing their needs on a daily basis
- ✓ Urban and with a young attitude that value their time and money. Clear value the trade off of their benefits compared with costs, while making their decisions
- ✓ They initiate or change their banking relation when they start/change working place or when they shop for a mortgage
- ✓ Relations are made in a very informal way, highly technological and new tools and devices - sms, email, web, mobile, digital, virtual - are mandatory terms in their language
- ✓ Value peer opinion and independent advise when make their decisions.

Example #2: ActivoBank - a new banking concept



The new concept and its distinctive features

Simplicity, Transparency, Convenience, Trust and Innovation

A bank with a **complete retail banking offer**, design at the detail level, in order to simplify the servicing of our customers and recover trust in the banking system by being **more close to the customer**. **Supported by social networks** and with a **new presence within the emerging channels and communication tools**, will adopt a completely **new banking language** and style in order to be better understood and transparent.

Innovation and new technologies will allow the bank to be closer and accessible to the customers that have no time to waste with "*old fashion*" ways of shopping for banking services.

In detail the **7 distinctive pillars of the new concept**:

- ✓ Product offer - very simple;
- ✓ Small and new image of branch network;
- ✓ Commercial network tin banking employees and independent promoters;
- ✓ New distribution channels - web 2.0 and Mobile smartphones;
- ✓ Worksites;
- ✓ New and more efficient processes;
- ✓ Brand and its positioning.

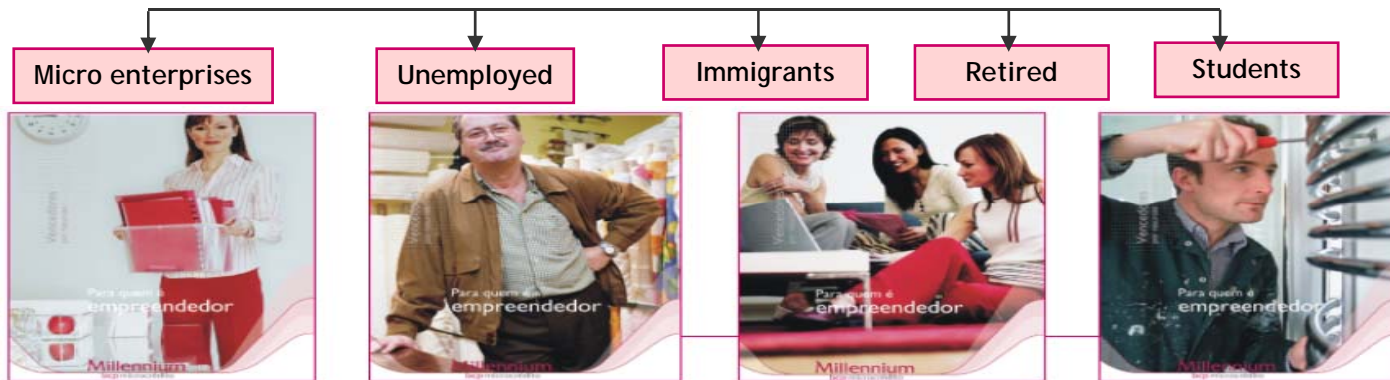
Example #3: Microcredit network

Millenniumbcp is the only bank in Portugal that has implemented an autonomous Microcredit network.

A network that aims and gives form to opportunities and for those who traditionally have no access to credit.

Rather than a mean of solidarity or social patronage, is a mean to promote entrepreneurship and viable business initiatives, which otherwise would have a limited chance to succeed

We believe in people, in their skills and abilities able to create and recreate, to restart most of all, to undertake! A logic of sustainability that revealed to be an rewarding experience.



In 3 years and, to date Microcredit network created about 1.300 jobs, co-founded 726 projects representing a total amount of € 7.9 million which reflects the success of this operation.

The decision to develop an autonomous network of Microcredit is a main pillar of Millennium bcp's social responsibility commitments and policies.

Example #4: Strong Authentication System (SAFe)

Millennium bcp

Individuals | Business | Investment Banking

Home Accounts Savings Mutual Funds Trading Cards Loans Insurance

Português BankMail Security Help

Logout Transfers > Occasional

Assets

Current Accounts

Transfers

Bill Payments / TopUp

Securities Portfolio

Credit Cards

Confirm the Operation

Current Account: 0000000000000000 - CONTA JOVEM

Available Balance: 0 EUR

Authorized balance: 0 EUR

Priority:	Normal
BIN of Beneficiary's Account:	0065-0922-00221970000-41
IBAN of Beneficiary's Account:	PT50 0065 0922 00221970000 41
Beneficiary's Name:	Best
Amount to be transferred:	100,00 EUR

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Securities Portfolio

Credit Cards

Authorisation of Operation

■ **Authorisation Code**

Please enter the Authorisation Code sent to your Mobile Phone nr. xxxxx7613 (*).

Authorisation Code

By SMS:

(*) Mobile phone number registered on your personal data. If you don't receive a SMS message in the stated period of 1 minute, [click here](#).

Notes:

1 - The mobile communications operators are entirely responsible for the service level of the SMS messages. The Bank can not be held responsible for SMS messages not received within the period of 1 minute on the above mentioned mobile number.

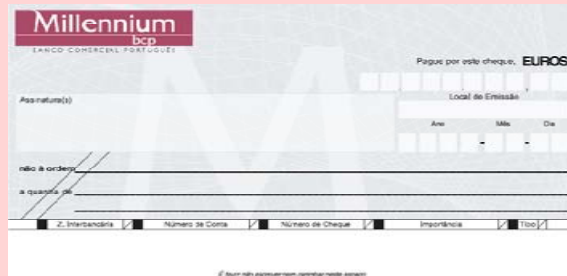
2 - **Money laundering prevention and suppression act**
The bank, under the terms of current legislation (Portugal - Act 11/2004 of March 27), within the scope of execution of certain banking transactions that require the intervention of other financial intermediaries, may reveal my identity to the latter, as well as details of the transaction.

Take security to the next level, keeping usability

- **Risk exposition was drastically reduced with the SAFe approach.** The exposure to *phishing* activity reduced significantly, granted to clients a increased level of support.
- **SAFe is based on something I know** (User Code, Password or PIN) **and something I own**, Token and chip card or cell phone. In Millennium bcp the system was based on Cellular Phones, taking in consideration the level of penetration of Mobile Phones in our market (above 100%!) and the strategic objective to deliver a solution with a good level of usability and availability.
- **SAFe implementation was a good example of equilibrium in IT Innovation, Risk and Clients.**
- **Clients performing an operation over internet, when needed receive a SMS with the authorization code to confirm the operation.**

Example #5: Pioneering the Priority Payments Scheme and launching a new type of cheques

- The Priority Payments scheme is limited to Euro payments inside the EEA. Millennium bcp was the first Portuguese Bank to have this service available for customers and one of the few banks that complied with the launch date settled by EBA.
- This system is 4 hours timeframe, from originating customer account to beneficiary customer account with same-day availability of funds. Designed to support a different market need on a pan-European level. A priority payment is governed by specific processing conditions.



- For better security for the cheque drawers, in case of fraud with forged endorsements, Millennium bcp included in the list of already existing types of cheques such as an order cheque that contains the language "to the order of (name)", also a new type of cheque with the language "payee only" that was available for clients since January 2009.
- These kind of cheques cannot be transferred by endorsement, therefore it was printed on the front of the cheque the language "payee only" and also the back side has printed on the following limitation, "No Endorsement Allowed" in order to ensure that the cheque will only be paid out to the rightful payee.

IPCTN08 Survey: Statistics Calculation

Intramural Expenditures

A. Current Costs

1. Identification of the Business Units/Departments potentially involved in R&D in Portugal.
2. Identification by each Department that perform R&D activities of the R&D activities and time dedicated to R&D activities, culminating in the calculation of FTE.
3. Having as input the FTE as % of the total Employees of each Department calculation of operational costs (Personnel costs + Administrative Costs) of each Department (cost accounting supplied by the Management Information Department). We use a pro rata system.
4. Total of Intramural Current Costs result from the sum of the total operating costs of each Department.

B. Capital Expenditure

1. Identification of the R&D activities and projects and related equipment acquisition.
2. Extraction from the 2008 CAPEX data base (supplied by DPCO - Planning and Budget Control Department) of the values associated with the acquisitions identified in 1.

Total of Intramural Expenditures = A + B

IPCTN08 Survey: Statistics Calculation

Extramural Expenditures

Expenditure related with R&D services (R&D services hiring or financing)

1. Companies

- ✓ Calculation performed by DPCO (Planning and Budget Control Department), based on the Administrative Costs related with activities/programs/projects with participation of third parties (e.g. McKinsey or other consultancy firms) related with R&D.

2. Private non-profit organizations/Technological Centres/Organizations of Interface with Companies

- ✓ Calculation performed by DPCO, based on the costs effectively supported by the Bank and Millennium bcp Foundation in the scope of Sponsorship and Donations granted to third parties whose activities and programs are identified as R&D (e.g. Protocols with Universities, Institutes, Foundations, Associations, etc.).

3. Higher education

- ✓ As in 2. (e.g. scholarships, chairs, publications and academic research).

4. Government

- ✓ Not reported in the 2008 survey.

5. Other R&D foreign institutions

- ✓ Not reported in the 2008 survey.

IPCTN08 Survey: Results

- Total of Business Units involved in R&D in Portugal: 22
- Total of Employees involved in R&D in Portugal: 855 (~8% of total employees in Portugal: 10,583)
- FTE: 259 (~30% of the employees of Business Units involved in R&D)

▪ Intramural Expenditures

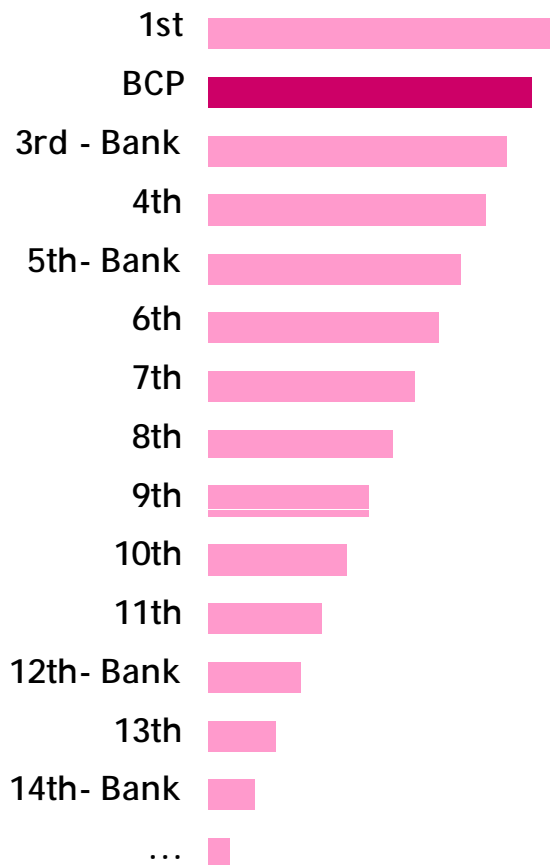
✓ Current Expenses	71.5 € m (6.9% of total operational costs in Portugal, 7.4% excluding depreciation)
✓ Capex	10.2 € m (44% of the hardware and software investment and 18.5% of total investment in Portugal)
✓ Total	<u>81.3 € m</u>

▪ Extramural Expenditures

✓ Companies:	2.2 € m
✓ Private non-profit organizations and other	0.1 € m
✓ Higher education	<u>0.8 € m</u>
✓ Total	3.1 € m

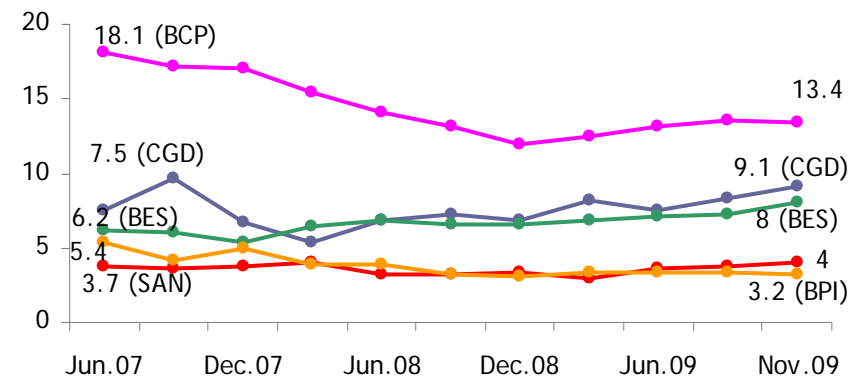
Raking of innovation (2007)

Ranking of R&D Investment in Portugal



Most Innovative Bank

References above 2%



BCP continued to be recognized as the “Most Innovative” Bank by Basef/Marktest at the end of 2009.



Millennium

bcp