OSIsoft Regional Seminar 2012

PI System @ Genentech -> Oceanside

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November 13, 2012

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Roche At A Glance

Roche is the world's largest biotech company with truly differentiated medicines in oncology, virology, inflammation, metabolism and CNS.

Roche is also the world leader in in-vitro diagnostics, tissue-based cancer diagnostics and a pioneer in diabetes management.

Roche's personalized healthcare strategy aims at providing medicines and diagnostic tools that enable tangible improvements in the health, quality of life and survival of patients.

Fast Facts

- Founded in 1896 in Basel, Switzerland
- Currently over 80,000 employees worldwide
- In 2011, group sales were 42.5 billion Swiss francs
- In 2011, R&D investment was over 8 billion Swiss francs
- 21,000,000 patients were treated with innovative Roche medicines in 2011

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Genentech At A Glance

Founded more than 35 years ago, Genentech is a leading biotechnology company that discovers, develops, manufactures and commercializes medicines to treat patients with serious or life-threatening medical conditions.

Personalized Healthcare is a key element of our research and early development strategy. We're focused on tailoring treatments to specific diseases and patients and identifying which patients are most likely to respond.
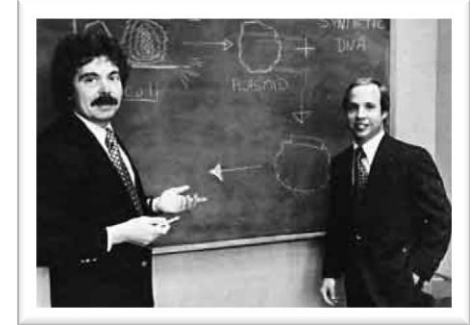
Fast Facts

- Founded in 1976
- Became a member of the Roche Group in March 2009
- Headquarter in South San Francisco, California for all Roche pharmaceutical operations in the United States
- Over 11,000 employees
- Genentech sells approximately 35 products and devices in the US
- US Pharmaceutical sales were 12.2 billion Swiss francs in 2011
- gRED has approximately 30 new molecular entities in clinical development

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The First Biotech Company

Genentech was founded in 1976 by venture capitalist Robert A. Swanson and biochemist Dr. Herbert W. Boyer. In the early 1970s, Boyer and geneticist Stanley Cohen pioneered a new scientific field called recombinant DNA technology.
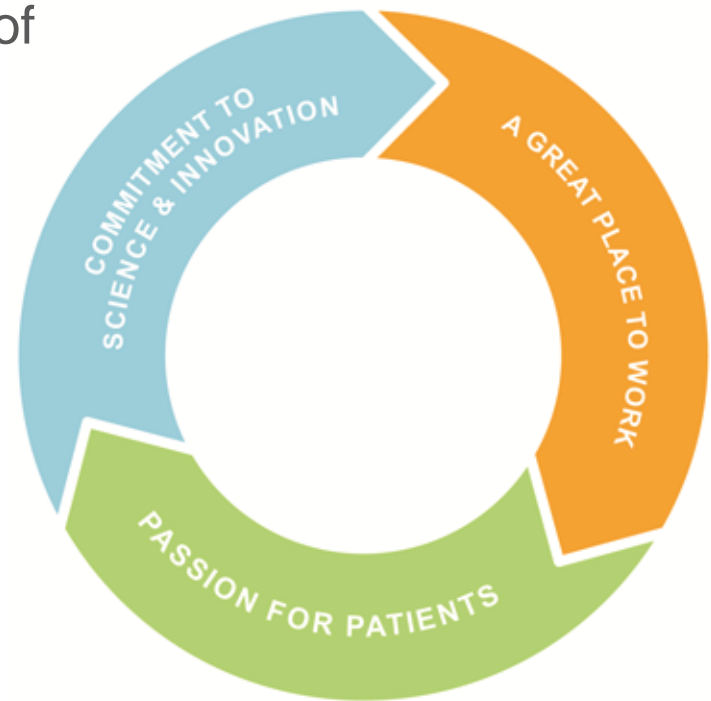

After hearing about the breakthrough, Swanson placed a call to Boyer and requested a short meeting. Swanson's enthusiasm for the technology and his faith in its commercial viability were contagious, and the meeting extended from 10 minutes to three hours. By its conclusion, Genentech was born.

Though Swanson and Boyer faced skepticism from both the academic and business communities, they forged ahead with their idea. Within a few short years, they successfully demonstrated the viability of using recombinant DNA technology to develop products with practical applications and, in so doing, launched a whole new industry.

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Science is Personal

At Genentech, we're passionate about finding solutions for people facing the world's most difficult-to-treat conditions. That's why we use cutting-edge science to create and deliver innovative medicines around the globe.

We commit ourselves to high standards of integrity in contributing to the best interests of ***patients, the medical profession, our employees and our communities*** based on the continual pursuit of ***scientific*** excellence.

Our Mission and Values

Our Mission as a leading healthcare company is to create, produce and market innovative solutions of high quality for unmet medical needs. Our products and services help to prevent, diagnose and treat diseases, thus enhancing people's health and quality of life. We do this in a responsible and ethical manner and with a commitment to sustainable development respecting the needs of the individual, the society and the environment.

Our Values are core to how we want to behave as individuals, and collectively as an organization. They define fundamental attributes for guiding decisions and actions leading to increased innovation and business performance.
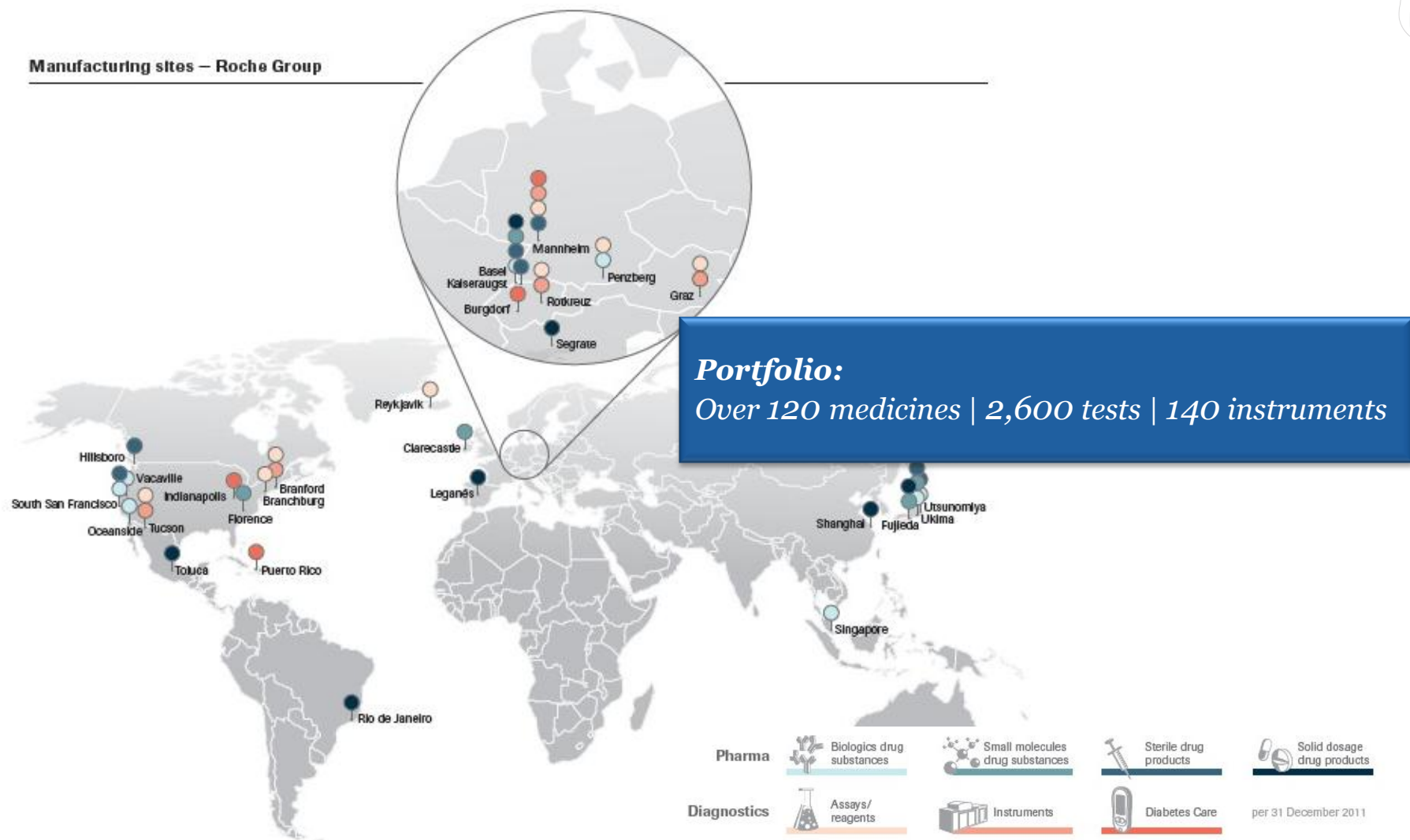
- **Integrity:** We are consistently open, honest, ethical and genuine.
- **Courage:** We are entrepreneurial and thus take risks, reach beyond boundaries and and experiment.
- **Passion:** We use our drive and commitment to energize, engage and inspire others.

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28 manufacturing sites with 14,786 employees

Manufacturing and Procurement

Manufacturing sites — Roche Group

Mannheim
Basel
Kaiseraugst
Penzberg
Graz
Burgdorf
Rotkreuz
Segrate
Reykjavik
Clarecastle
Hillsboro
Vacaville
Branford
Branchburg
South San Francisco
Indianapolis
Florence
Oceanside
Tucson
Toluca
Puerto Rico
Leganés
Shanghai
Utsunomiya
Ukima
Fujieda
Singapore
Rio de Janeiro

Portfolio:
Over 120 medicines | 2,600 tests | 140 instruments

Pharma
- Biologics drug substances
- Small molecules drug substances
- Sterile drug products
- Solid dosage drug products

Diagnostics
- Assays/reagents
- Instruments
- Diabetes Care

per 31 December 2011

As of December 31, 2011

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AGENDA

- **Problem Statement**
- **Solution**
- **Future developments**
- **Questions**

Problem Statement

1. PI System Health
2. Data Access
3. Data Display

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Problem Statement – PI System Health

- Frequent downtime of server

- Data transfer errors from problems with PItoPI interface

- Impact to manufacturing support

- Impact to product studies

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Solution – PI System Health

- Upgraded PI System to PI Server 2010 R3

- Expanded system to have individual machines have specific purpose

- Converted system infrastructure from physical server to virtual machines

- Windows 2008 R2

- Upgraded all interfaces (PItoPI, EMDVB, OLEDB, etc)

- Implemented PI PerfMon (PI servers and DCS servers)

PI 3.4.385.77

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Problem Statement – Data Access

- Many users searching for data in different locations using many tools

- Restrictions on non-company provided machines

- Time consuming user account management

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Solution – Data Access

- Educate users on the "Power of PI"

- Consolidated commonly used trends in one location

- Leveraged PI 2010 active directory to control system access

- Electronic account management (requests, verification, approval)

- Use Windows TS Web Access and RemoteApp to provide non-company provided machines access to PI System and client tools
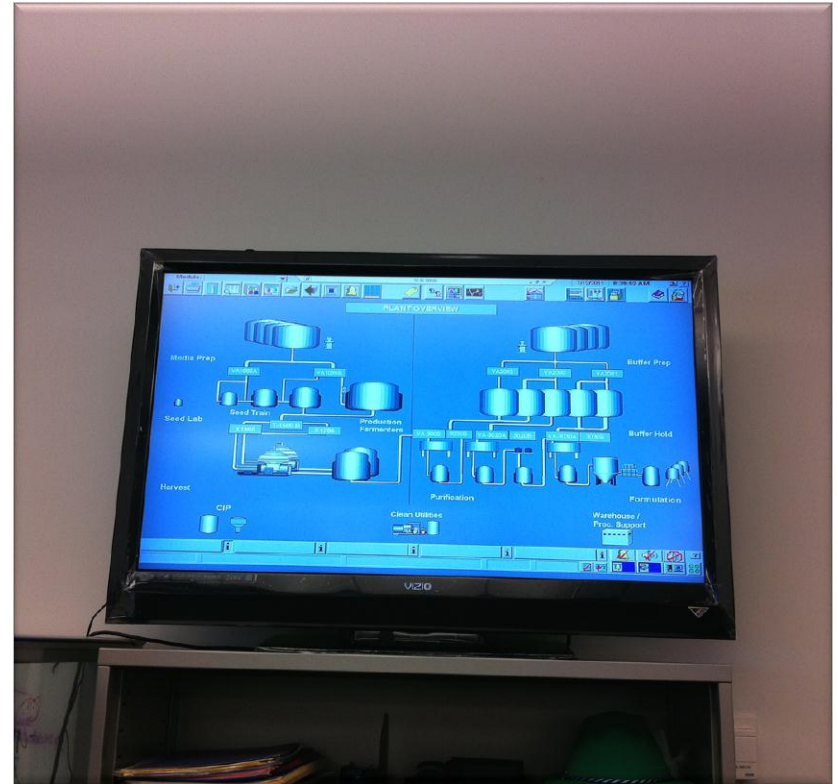

Example of RemoteApp tool

Problem Statement – Data Display

- Most common display of PI System data through PI ProcessBook

- Need to provide overviews of plant data to a larger audience

- Critical data not always available in the PI System

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Solution – Data Display

- Implemented PI WebParts with Microsoft Sharepoint

- Installed GRiTS to convert DeltaV graphics to PI ProcessBook/PI WebParts displays

- Deployed television dashboards to provide content to larger audience

First dashboard

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Future Developments

- PI AF – provide more templates and increase content of existing elements

- PI AF – access other databases (SQL, Oracle)

- Deploy more dashboards

- Evaluating Umetric's tool, SIMCA Batch On-line

- Expanded PI Notifications deployment

- Address Sharepoint speed

- Evaluate PI Coresight

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Special Thanks

- OSIsoft
  - Troy Carbaugh, Hong Kim

- Zymergi
  - Oliver Yu

- Control Systems Integration
  - Lewis Cain, Bill Macintosh

- Data South Systems
  - Charles Campbell

- Genentech
  - Scott Hodulik, Craig Taylor, Sankara Shunmugasundaram

- Emerson Process Management
  - Raiza Ante

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Questions???

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