Decision Consulting at Eli Lilly and Company A Journey (History, Evolution and Challenges)

Presentation to DAAG 2011 Charles Persinger



Eli Lilly and Company

Founded in 1876

10th largest pharmaceutical company in the world

Headquartered in Indianapolis, IN

2010 net sales = \$23B

2010 employees = 38,350

2010 R&D spend = \$4.9B

Example products:

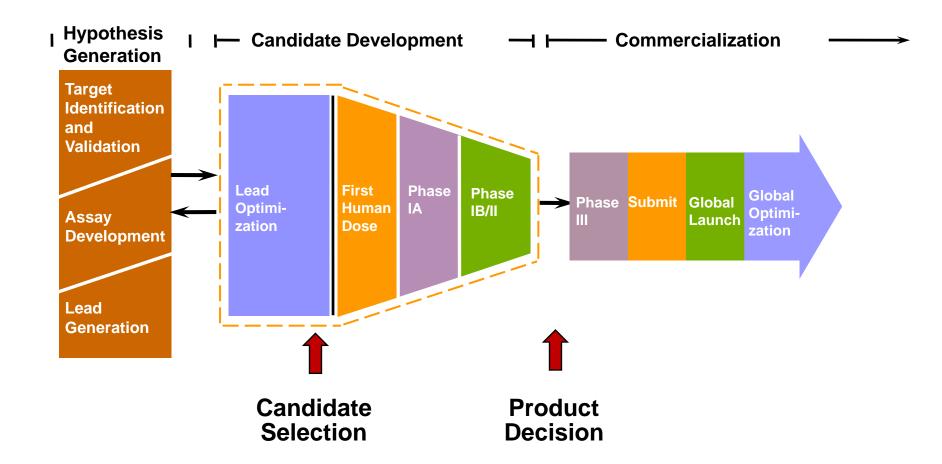
- Humalog (diabetes),
- Prozac and Cymbalta (depression),
- Gemzar and Alimta (cancer)

Source: www.lilly.com





The Drug Discovery and Development Process



Decision Sciences at Lilly

Group founded in 1993

Reports through Project Management within R&D

Three "pillars"

- Portfolio Management
- Decision Consulting
- Scholarship/Education

Size: 8-12 people (majority dedicated to Portfolio Management)

- 1 administrative lead
- 2-3 senior technical
- 5-6 junior technical

Decision Consulting

Internal Management Consulting

Enable Quality Decision Making

- Use Decision Analysis principles, concepts, tools, etc
- Consult on challenging decisions brought to the group by internal clients

Capabilities

- Consulting and facilitation skills
- Traditional decision analysis tools and approaches

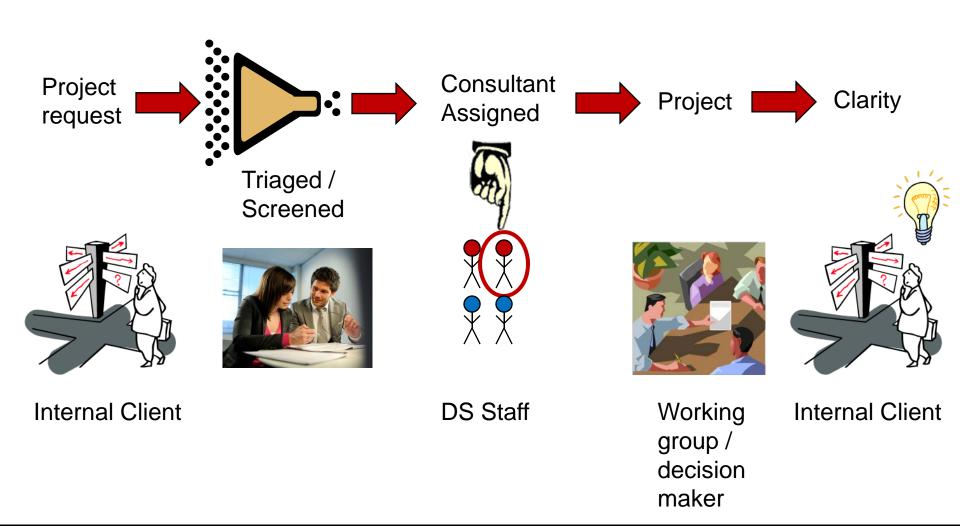
Approach

- Situation specific
- Range: Quick advice to leading 6 month project

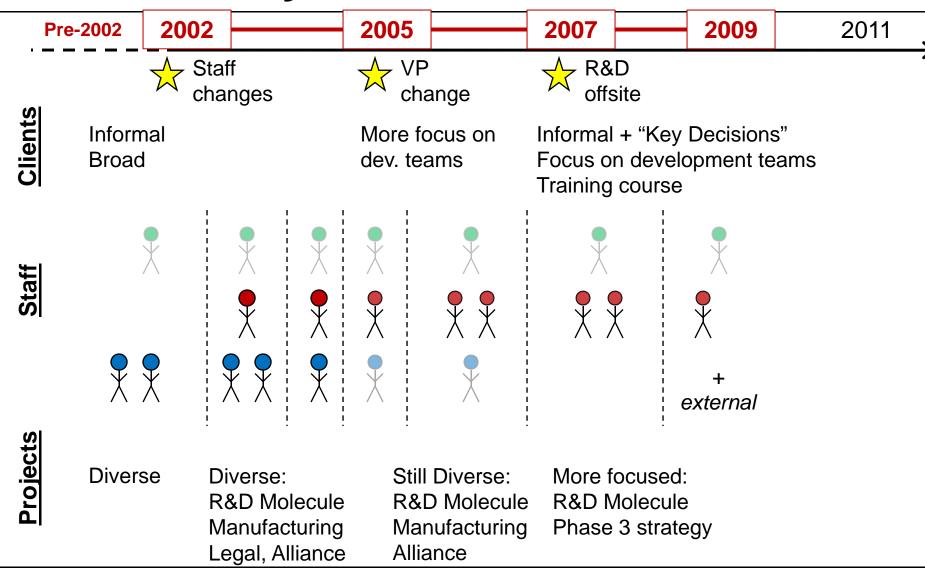
Clients

- Internal teams, decision makers and individuals
- Evolved over time

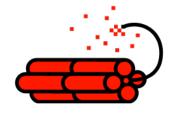
General description



The Journey...



Journey...



Pre-2002 2005 2007 2009 2011





"reorganize" & "business units" = new decision makers

Lilly Unveils Blueprint for Speeding Inhovative Medicines to Patients

Companywide Reorganization Aimed at Delivering More Value to Customers Company targets \$1 billion in cost savings by end of 2011

INDIANAPOLIS, Sept 14, 2009 /PRNewswire-FirstCall via Context News Network/ -- Eli Lilly and Company (NYSE: LLY) today unveiled a new operating model and announced series of changes to speed medicines from its pipeline to patients. To help achieve this goal, the company will establish a Development Center of Excellence to streamline an accelerate late-stage development of new medicines, and will reorganize its pharmaceutical business into four business units that will operate alongside the Elanco animal his business unit. In addition, the company has set a goal to significantly reduce its cost structure by the end of 2011.

"We remain confident that continued focus on medical innovation is the best way to ensure the long-term growth of our company," said John C. Lechleiter, Ph.D., chairman and executive officer. "The changes we are announcing today will accelerate the progress of the most exciting pipeline in our history, with more than 60 molecules currently in clinic development. These changes will also ensure that we meet the changing needs of our customers and operate our business in a manner consistent with an increasingly challenging environment. I have great confidence that these changes will have a very positive impact on the company's future."

To achieve these objectives, Lilly will:

- -- Establish the Development Center of Excellence (COE) to help address the industry-wide challenge of a drug development process that is increasingly complex, slow and expensive. The Development COE will distinguish Lilly from its peers by using one common operating system, one common set of priorities and a singular focus to streamline the development of new medicines. The ultimate goal of the Development COE is to accelerate the launch of important Lilly molecules over the next decade and bring innovative medicines to patients sooner.
- -- Organize the company around five global business units: oncology, diabetes, established markets, emerging markets, and Elanco animal health, thereby moving from a predominantly functionally-oriented organization to a business-unit structure.

Source: www.lilly.com

The Journey...

Pre-2002 2002		02	2005		2009 -	2011	
ωı	Staff changes			R&D offsite	Corp.		
Clients	Informal Broad focus		More focus on dev. teams	Informal + "Key' Focus on teams Training course	Strong pu	New Decision Makers Strong pull - teams Enabling teams	
Staff		* *				• •	
_			* *	6	+ external		
Projects	Diverse	Diverse: R&D Molecule Manufacturing Legal, Alliance	g Manufacturin		e R&D M egy Phase	ed: lolecule 3 strategy late Selection	

Project Example (Project A vs. Project B)

2009 — 2011

Background:



- Two projects (Project A and Project B)
- Both in early development
- Very similar projects (same indication) with no intent to bring both to market

Decision(s):

- Can we make a decision now about which to choose (A vs. B)?
- If not, when can we make a decision and how?

Approach and result:

- Identified key uncertainties and value criteria
- Evaluated alternatives across diverse set of criteria and stakeholders
- Decision reached to choose Project A now (stop Project B)
- Approach enabled a decision when many thought a decision couldn't be reached
- Decision saved the company ~\$40M vs. the momentum strategy

Project Example (Project A/B) – The interesting part...

How a decision was made in a changing decision making environment...

Sept:

- Decision consulting project gains sponsorship w/development committee
- Lilly announces new reorganization with structure to be in place by Jan. 1

Oct:

- Project Kickoff: Engage sponsor who had been engaged on multiple "Quality Decision Process" projects with Decision Sciences
- New organization starts to take shape:
 - · Uncertainty over who will make the decision,
 - Engage additional sponsor in the newly forming Business Unit (added to a long list of stakeholders)

Nov/Dec:

· Working team's efforts

Jan:

- Working group reviews with Project Team(s) → recommend "Choose Project A"
- Team requested to go to new development committee representing Research and the new BU (first ever agenda item for the committee) which only has recommendation, not decision making rights
- Development committee sends team to both head of Research and head of BU
- Both head of Research and head of BU "make" a decision to "Choose Project A"

Journey...

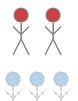
Pre-2002 2002 2005 2007 2009 **2011**





CLIENTS

 Still working to strengthen relationships in new decision making structure



STAFF:

- Establishing more fungible staff
- Training (experiential, external)
- Leveraging more standardized tools



PROJECTS:

- More focus on early development decisions
- Strong engagement from drug development teams
- Efforts to enable team leaders to leverage their training

Reflections

Evolution of Clients

- Determined by:
 - Senior leadership's focus
 - Consultant / client relationships
 - Decision making environment
 - Capabilities and interest of the consultants
 - Marketing focus

Changes:

- Less diverse (now more focused on drug development teams)
- A few aware & supportive, key decision makers → more, "unaware" decision makers

Challenges:

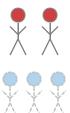
- Changing decision making environment, level of leadership support and consultant changes
- Approaches:
 - Try to maintain key contacts with decision makers and organizations
 - Leverage prior "happy" clients
 - Leverage "students"
 - Leverage supportive senior leadership



Reflections

Evolution of Staff

- Determined by:
 - HR Policies
 - Personnel decisions
 - Local & broader organizational needs and focus
- Changes:
 - Ebb and flow over time
 - Internal development of talent
 - Fungible resources
- Challenges:
 - Not a fungible skill set (hard to directly bring someone in and maintain brand)
- Approaches:
 - Develop approach to development of talent (external training, experiential learning)
 - Standardize tools and develop common frameworks/approaches
 - Leveraging others external to Decision Sciences (alums, training of project managers / others for smaller projects, etc)



Reflections

Evolution of Project Types

- Determined by:
 - Clients
 - Senior leadership's focus
 - Company challenges, strategies and environment
- Changes:
 - Less diverse (now more focused on drug development teams)
- Challenges:
 - Matching skills and approaches to project needs
 - Ensuring engagement in meaningful and appropriate decision (level of influence)
- Approaches:
 - Identify "key" decisions that could benefit and target engaging on those decisions
 - Understand evolving decision challenges (stay engaged with clients and the business)
 - Create solutions for new challenges (e.g., "focused/rapid" DA)
 - Identify opportunities to leverage prior work or create generalized approach to recurring decision problems



Where do we go from here

Clients:

- Solidify client base (relationship building)
- Continue to engage growing base
- Train decision makers?

Staff:

- Become more fungible
- Gain experience
- Leverage "others"

Projects:

- Identify and figure out ways to engage in evolving areas of significant decisions (e.g., candidate selection decisions)
- Create replicable and scalable approaches to recurring problems

The End...

(of the presentation, but not the journey)

Pre-2002 2002)2	2005		2009	2011	
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