K-State Olathe Animal Health Regulatory Affairs CRO - Sponsor Relationships March 5, 2019

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Historically

- The pharmaceutical industry had many companies with relatively narrow product lines.
- Animal health companies (pharmaceutical) were owned by larger, human health companies. Animal health vaccine companies tended to develop independently, some of which were acquired by large companies later.
- Most companies were vertically integrated to include discovery, development, regulatory approval, marketing and sales.

Outsourcing as a business model

- For most of the 20th century, business models focused on own, manage and directly control. This was the model that the US pharmaceutical industry followed as well.
- Diversification efforts of the 60s were engaged to take advantage of economics of scale and companies started acquire other companies to protect profit, however, multiple layers of management ensued.
- Outsourcing was not formally identified as a strategy until 1989 (Mullin)

Outsourcing gains traction

- By the 1990s many organizations were starting to outsource the universally common functions of business.
 - Printing
 - Data processing
 - Internal main distribution
 - Food services
 - Security
 - Other types of good housekeeping tasks

Outsourcing with strategic partners as part of a strategic plan

- The model was applied to much more complex and specialized needs
- Core business function were included
 - Discovery
 - Development
 - Regulatory Approval
 - Technical Support
 - Customer Service



Why do companies outsource

- Lower operational costs
- Maintain or reduce company headcount in times of expansion
- Manage risk associated with outsourced activities
- Gain access to world-class capabilities and expertise
- Third party relationship clout
- Free internal resources for other purposes
- Share risk with a strategic partner



Outsourcing - a contemporary definition

The strategic use of outside resources to perform activities traditionally performed internally by company employees.

Critical Factors for Success

- Understand company goals and objectives
- A shared vision
- Select the right vendor or client
- Continuous assessment and improvement in management relations
- Contractual agreements that appropriately distribute risk and responsibility
- Senior management support
- A carefully developed and religiously implemented communication plan
- Clear understanding of chain of command from both organizations

Ten Thousand Hours - the MVS Analogy

- Malcom Gladwell's 2008 book, Outliers describes the 10,000 hour rule (Bill Gates programming & early gigs by The Beatles before invading America)
- Our business started as mixed animal practice in 1987 with an area of expertise in microbiology
- Corporate clients all had their own farms, but needed help with overflow
- The basis was the personal relationships with friends that I met along the way
- By 1991, I'd estimate that I had my 10,000 hours "in"
- By the year 2000, we realized that their was a real "need"
- By 2004, the acronym, CRO was being commonly used to refer to our type of organization

Our Business

- Helping our customers evaluate
 - Safety and Efficacy of products for FDA/USDA/EPA approval
 - Determine appropriate models to provide clinically relevant data
 - Test model concepts in clinical (field) trials including multi-site studies

CRO Assessment



PriceQualitySpeed

Critical Components for Research

- Knowledge and Commitment to meeting the needs of the animals and staff
- Knowledge of Commitment to understanding the advantages and limitation of models
- Knowledge and Commitment to Quality
- Knowledge and Commitment to Compliance
- Follow Through

We deal with a high degree of diversity in our project mix - however - projects all have these needs in common

- Study Design to match regulatory need and applicable to use
- Data Capture to fulfill the intentions of the protocol
- Conduct the work in a fashion compliant to regulations
- Conduct the work in a fashion applicable to field use
- Conduct the work in a fashion that is repeatable

"What can possibly go wrong?" A few things to be aware of..

- Data Capture Systems should be designed to "Capture Data", not necessarily for the convenience of QC, QA or folks watching
- Electronic Data Capture as well as conventional methods
- Procurement has a place, but cutting off one leg of the stool does not serve the long term needs of the industry (lowest cost is not necessarily the highest value)
- Medical research is not a "commodity"
- Communication and IP, secure files

"What can possibly go wrong?" A few things to be aware of..

- Intellectual Property in today's world
 - ► Turn over of Key Personnel
 - Hackers
 - Secure Files and accidental file transfer
 - International use of IP
- Date Issues
 - What do you need and how will you analyze?
 - Quality or not at all
 - Ensure acceptance of the plan before you start



"What can possibly go wrong?" A few things to be aware of..

- Legal Issues can/have emerged parallel to the use of CRO
 - Contracts can attempt to limit financial obligation of sponsor in a research environment that is difficult if not impossible to control
 - When corporate clients show up to meetings with attorneys instead of scientists, the relationship changes
 - Ask the question, how did companies handle unfavorable results when they owned all of their own farms?
 - Strive to "over communicate" when protocol application problems are noted
 - Make sure that both parties have identified the responsible party

Summary We are all in this together!

- Corporate Sponsors (with responsibility to shareholders)
- CROs (with responsibility to animals and staff in our care)
- Regulators (with responsibility to consumers)
- Academicians/educators (with responsibility to educate and mentor to provide professionals for all of the above sectors)
- Quality/Compliance Professionals (with responsibility to components of all of the above)
- We all need to strive to help each other understand the needs and responsibilities

Thank you K-State Olathe for making this interaction possible

- Dr. Ralph Richardson
- Dr. Paul Cassidy
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- All Meeting Participants