RESULTWORKS
Transforming Strategy. Delivering Success.

Transformations

OF SPECIAL INTEREST:

- *Strategy execution is more important than the strategy itself*
- *Establish your ELN requirements carefully before jumping into product demonstrations*
- *Cross-functional teams must collaborate to define, align, and execute the strategy*
- *Defining and selecting best-fit informatics solutions for any R&D application*

INSIDE THIS ISSUE:

ALIGN BUSINESS ; EXECUTE STRATEGY
STEPS TO R&D / INFORMATICS ALIGNMENT

Life sciences informatics groups have expressed frustration in trying to determine how to best help their business counterparts. They have been reactive to information management requests over the last few years without necessarily solving the right problems or getting out in front of the business needs. That leaves informatics groups wondering where the business is going and how to best support it.

At the same time R&D organizations have been challenged to articulate a strategy which is actionable and well communicated. Among R&D managers we find conflicting perspectives on business objectives let alone strategies to achieve them. Consequently their requests to informatics groups tend toward point solutions that may be obsolete before they are adopted. Something is missing!

Alignment of the organization around business objectives and strategies has been missing. Without alignment, there is a lot of wasted effort in the organization. Departments are more likely to optimize their own silos, their internal workflow, and even their own systems, but without necessarily meeting the needs of the larger organization. For service groups like informatics, it is challenging enough to meet a singular set of needs let alone conflicting needs of each department.

ELN BEST PRACTICES AND PITFALLS

Many organizations today are planning to select and deploy Electronic Laboratory Notebook (ELN) solutions to their R&D organizations. Solutions are expected to replace existing departmental systems and in most cases will replace paper notebooks with a searchable repository of research information and corporate intellectual property. The ELN promises to save information in legible, searchable form while eliminating the collection, scanning and storage of paper notebooks. Some organizations even eliminate the witnessing process since the ELN system can keep legally defensible records and audit trails showing exactly when information was known and reduced to practice. This series of articles addresses some best practices and pitfalls often encountered by organizations throughout the lifecycle of an ELN implementation.

Part I of this series addressed "Establishing a Strategic Vision."

Part II: Defining Requirements

Best Practice: Form a core team of representatives from Research and IT and define your business requirements prior to entertaining specific ELN Vendor demos.

ALIGN BUSINESS; EXECUTE STRATEGY (CONTINUED FROM PAGE 1)

A study done in 1999 was based on a survey in which 169 businesses responded to questions indicating the importance of items influencing the alignment of IS (Information Systems) and business plans. The top 10 results comprise this list of Critical Success Factors for Business-IS Alignment as shown in the table.

Cross-functional, highly participatory, focused, motivated teams must collaborate to develop and to deliver on strategies. In addition to top-level objectives, they must pay attention to details embodied in processes, information, and technologies otherwise misalignment is likely to derail strategy execution.

ty. Other strategic inputs – corporate or business unit strategy, needs analysis, process analysis, gap analysis – would all be utilized to identify key candidates for the Strategy Map (a visual depiction of strategic plan).

4. **Create a Strategy Map.** Corporate or top-level perspectives - financial, customer, internal processes, learning & growth - flow down. The strategy map integrates critical strategic objectives identified from the SWOT.

5. **Establish Metrics.** In order to make the strategy effective it needs to be measured. Establish a baseline for each strategy and the threshold for achieving it. This can be built as a scorecard which many organizations have successfully adopted.

6. **Develop a Roadmap.** The roadmap links the strategy with improvement initiatives that will enable the strategy. These initiatives must cascade across organizations (e.g. business and informatics) such that objectives, initiatives, and metrics are linked and aligned. The initiatives will tackle process, technology, and organizational ways to generate results.

7. **Focus the Organization.** Without focus there are just too many distractions in R&D beyond job one of bring new compounds to market. It is just too easy to fall back on the same old way. Circle back to the energetic leaders to manage, monitor, and make adjustments as the strategy execution unfolds.

Critical Success Factors For Business-IS Alignment

1. Top management is committed to the strategic use of IT
2. Information systems (IS) management is knowledgeable about the business
3. Top management has confidence in the IS department
4. The IS department provides efficient and reliable services to the user departments
5. There is frequent communication between user and IS departments
6. The IS staff are able to keep up with advances in IT
7. Business and IS management work together in partnership in prioritizing applications development
8. Business goals and objectives are made known to IS management
9. The IS department is responsive to user needs
10. Top management is knowledgeable about IT

["Critical success factors in the alignment of IS plans with business plans", Thompson S.H. Tei, James S.K. Ang International Journal of Information Management 19 (1999) 173-185]

In "The Strategy–Focused Organization", Robert Kaplan and David Norton write that "A study of 275 portfolio managers reported that the ability to execute strategy was more important than the quality of the strategy itself." Given the gloomy statistic by Standish that only 16% of IT projects are successful, it's hard to disagree with the above reference.

The ability to execute strategy was more important than the quality of the strategy itself.

In order to align the business then, strategies must be driven from the top, they must be shared and well communicated, and then the execution must be managed with great focus to achieve it. Corporate objectives need to flow down to the business units.

Leveraging the work of Kaplan and Norton in conjunction with our own methodology, ResultWorks recommends the following **steps to align the business and execute the strategy**:

1. **Become Energetic Leaders of Strategy Change.** If senior leadership is not committed to new ways of working together with business counterparts, strategy will not be implemented, and the opportunity to realize new business directions will fail.

2. **Target the Organization.** Depending on whether all of R&D or specific organizations are the focus, make the box big enough. Include touch point organizations from suppliers to customers of the organization of focus.

3. **Assess Alignment to Current Strategy.** Conduct a thorough SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis to determine what works, what does not, where opportunities exist, and where there is uncertain-

Along with drug candidates, information is one of the primary products of life sciences research and development. It must be a critical success factor for R&D and informatics leaders to work together in partnership to set priorities that will move the business forward. The steps described here offer ways to define key strategies; an approach for aligning R&D and informatics groups; and methods for executing on the agreed strategies.

For more ideas on how to drive greater alignment and execute the strategy in your organization, contact ResultWorks.

DEFINING & SELECTING R&D INFORMATICS SOLUTIONS

ResultWorks has helped clients define and evaluate informatics solutions across Life Sciences R&D for many years. These range from electronic lab notebook (ELN) solutions to PK systems to clinical trial management systems (CTMS) and more. These systems are clearly very different but regardless of the application, we use techniques that ensure our clients find the best solution to meet their needs.

The "and then" approach

At a recent conference, a colleague explained their approach to selecting a laboratory information management system (LIMS). First we had five vendors come in and demo their products. After the demo, we knew one of the vendors could not do what we needed but the other four looked pretty similar. Then we put together a few pages of requirements and sent them to the vendors. Based on their responses, three of the four vendors looked pretty similar and we dropped the fourth. Then we decided to do a small pilot and two of the three vendors looked pretty similar but the third vendor couldn't do what we needed. And then we brought the vendors in to do a presentation on their future direction. It was pretty close but we decided on vendor A.

Definition & Vendor Selection is a Project

There is a better way than the trial and error approach described above. Whether you are looking for an ELN, a LIMS, a CTMS, or a data management solution taking a methodical project-oriented approach to defining requirements, establishing selection criteria, and selecting the best-fit vendor solution to meet your needs is critical to your success and minimizes both the effort and duration of this critical activity. The key steps that have worked with our clients are shown in the graphic below.

Informatics Definition & Selection

1. Initiate planning and conduct kick-off
2. Understand the current environment; what works; what doesn't work; and opportunities for improvement
3. Define and prioritize requirements to support future processes
4. Leverage the requirements in a request for proposal (RFP) to vendors
5. Evaluate vendor solutions and services based on criteria
6. Select the best-fit vendor solution
7. Plan and execute vendor contracting process

The timing and organization of these steps will vary depending on each client's schedule and the demands of the project.

Current & Future Environments

In most cases it is beneficial to understand and document how the business operates. By documenting current business processes, information flow, and systems in use, analysis and discussion can be facilitated to drive toward a future process. The team is able to focus on what works, what is creating barriers to success and then is able to define a best of breed future process for the new system.

When there is absolutely no current business process, change the focus of this step. If work is only being accomplished via individual efforts, it may make sense to establish a vision for what the process should be and define requirements around that vision.

Collaboration of the team is key to defining the future process and the requirements to support it.

Define Requirements

A well defined set of business requirements serves as the foundation for solution selection as well as the basis for testing and validation that may be required at the time of implementation. Business requirements should support and tie to the defined future business process. Once defined, they should be prioritized and weighted based on critical business need. These weighted requirements allow the project team to focus on the business needs of the new system and drives the subsequent steps in the solution selection process. With the requirements in hand the team can look at software products from a true business need rather than based on bells and whistles vendors may want to showcase. The requirements limit the scope to what is truly needed and if a requirement does not support the business process then consider it out of scope.

Request Proposals

Once requirements are defined, request proposals from identified vendors. We recommend the requirements and the business processes be included for the vendors. Depending on company policies, the procurement group may need to get involved to formalize the solicitation. It is important to ask

vendors to differentiate between standard features in the product, items that are configurable, custom work, and product enhancements that can be included in future versions of the standard product.

Evaluate Vendor Solutions

Vendors should be evaluated based on how well their proposed solution meets your requirements and supports your business processes. Additionally, it is important to understand the professional services offered by each vendor and their track record. We recommend three areas to be weighed:

1. Proposal Comparison
2. Scripted vendor demonstrations
3. Reference checks

Proposals should be scored side-by-side to compare strengths and weaknesses resulting in tradeoffs that you will have to make.

Vendors whose proposals are viable should be invited to participate in an on-site demonstration. We strongly recommend scripting the vendor demonstrations according to your business processes. It will be much easier for the stakeholders to evaluate solutions if they see their business process demonstrated. We like to score the solution as the business process is evaluated. Ven-

Vendors who can support your processes will follow the script; those who cannot will be obvious.

dors who can support your processes shine in this area; vendors who cannot support you will be obvious. In the absence of scripted demonstrations, vendors will demonstrate their "cool" features tempting you to make emotional rather than thoughtful decisions. It is unlikely that any vendor will meet all of your requirements so keep the prioritization in mind when assessing their capabilities.

Reference checks should not be overlooked, nor should they be deferred until after the selection process is complete. Ask vendors for three references. Prepare reference questions in advance, especially in areas of concern. Information from the references will help to shape your decision and may also help you avoid

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ELN BEST PRACTICES AND PITFALLS
(CONTINUED FROM PAGE 1)

Understand the types of scientific information that will be recorded in the ELN and the intra and inter-departmental interactions and work-flows that need to be supported or improved. Work with researchers from the various target organizations and understand the information they currently record in paper notebooks and existing systems. Be sure to identify the key intellectual assets of your company especially the information used in patent applications, patent defense or patent chal-lenges. List your requirements and prioritize them identifying the re-quirements that must be fulfilled vs. other requirements that are im-portant or just nice to have in an ELN solution. Your prioritized require-ments become a solid foundation for objective vendor evaluation that will withstand further scrutiny when soliciting funding and when making trade-offs in future implementation hurdles.

<u>Pitfall:</u> Many organizations invite ELN vendors to demonstrate their solutions before defining their own requirements. While vendor demos are useful to learn what to expect from available ELN solutions, con-ducting demos too early can lead you to define requirements that the vendor solutions can perform instead of focusing on what your organi-zation needs. This also leads organizations toward a solution that seems to be the best but may not provide the best overall value. Too often, favorite vendor solutions evolve based on the vendors that have the nicest looking user interface, the friendliest sales team or the best bells-and-whistles features.

In the next newsletter, Part III will cover Selecting an ELN Solution.

"What ResultWorks accomplished in two months would have taken us two years to do on our own."

ABOUT RESULTWORKS

ResultWorks is a management consulting company which transforms business strategies for Life Science companies into successful technology and process optimization initia-tives. Results are achieved through skilled facilitation and exceptional management leadership.

The ResultSession[SM] is the cornerstone of our methodolo-gy, promoting collaboration and rapid decision-making while balancing people, process and technology challenges.

To request additional information, send us an email at marketing@resultworksllc.com or visit our website at www.resultworksllc.com .

INFORMATICS SOLUTIONS
(CONTINUED FROM PAGE 3)

Select Best-Fit

After the vendor evaluation steps are complete it is decision time. In addition to scoring and summarizing the evaluation steps above, we recommend doing a SWOT (strengths, weaknesses, opportunities, threats) analysis for each vendor. This exercise will help crystallize and achieve stakeholder consensus on the best vendor solution for your company. We prefer to conduct a work-shop around these materials including the stakeholder team in order to build support for the recommended vendor. The out-come of the workshop serves as a communication vehicle for senior management sponsors to convey why one vendor is rec-ommended over the rest of the field.

Conclusions

This disciplined approach to defining needs and selecting a ven-dor is highly manageable and yields results that can support key investments in informatics solutions. Companies that try to shortcut this process often wind up with solutions or services that don't meet their needs and they don't find out until a significant investment of time and money is expended. It is a pay-me-now or pay-me-later scenario. While the approach presented here seem-ingly takes more time upfront, this is time well spent to assure that the solution you select supports your business direction and your stakeholders will support the selection during the chal-lenges of complex implementations.

In The News

Sampling of client initiatives:
R&D-wide ELN Implementation Project
Clinical Study Assessment
Global LIMS Strategy Transformation
Knowledge Management Roadmap

Recent & upcoming appearances:
45th DIA Annual Meeting in San Diego June 2009
Susan Butler, Managing Partner, presented "Business Pro-cess Analysis Enables CTMS Definition & Selection Process"

InnovationWell 2009—Knowledge Management & Collaboration at Bryn Mawr College, October 12th
Bob O'Hara, Managing Partner will present
"R&D Knowledge Management – Technology Initiative or Business Fundamental?"

LabAutomation 2010—January 23-27
Papers submitted on ELN & Knowledge Management

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