

Visualization Accelerates Product Delivery LifeCycle

Abstract:

Design, manufacturing and distribution firms are rethinking norms by delivering value using automation. Automation solution firms struggle to communicate the value they bring to solve client problems. This white paper introduces the concept of “visualizations” that allow solution providers to show solution seekers how an automation solution works. Visualizing solutions results in lower cost, improved communication and faster client/vendor buy-in.

Introduction:

Recent events uncover the risk of supply chain interruptions, intellectual property theft, missed market opportunity and loss of business control when production is in the hands of overseas producers. Upheavals and growing risks have shaken traditional thinking regarding global product development, distribution and supply chain business processes.

Global events force high level decision makers to rethink old strategies that sent manufacturing offshore. New thinking considers reshoring production, using modern advances in automation that create shorter, more robust and responsive supply chains, lower inventory and labor costs.



Why are executives rethinking their strategies?

Classic business school thinking drove nearly all manufacturing to low cost overseas producers, seeking higher profits through lower labor costs. Unfortunately, recent events expose the severe business risks of such an approach.

- Geo political forces and the outbreak of COVID have broken supply chains.
- Unscrupulous overseas producers copy product designs and steal intellectual property from their clients.
- Using stolen IP, overseas producers then create knock off products and compete with their clients.
- Overseas producers now automate to reduce labor cost and increase profits.



What is the new strategic direction?

Astute executives are now examining how to “reshore” production by leveraging design innovation and automation, both in production and distribution.

The advantages are many:

- Leverage local design innovation while maintaining control of IP.
- Shorten the time from concept to product via rapid prototyping with local vendors.
- Leverage local vendor knowledge of automation solutions in production, warehousing and

distribution.

- Reduce inventory via faster delivery through local channels.
- Eliminate expensive, slow, risky and fragile links in the supply chain.

Opportunities for automation solution providers.

This new reshoring strategy expands the market for solution providers delivering automation products and services.

- Smart, collaborative robots work alongside people to perform repetitive tasks and increase productivity.
- Mobile robots move materials through warehouses, speeding the flow of product through the supply chain.
- Vision and sensing systems support automated material handling, machine load/unload, and bin picking.
- Smarter control systems handle more tasks with simpler programming.



Automation is revolutionizing multiple industries, including life sciences, semiconductor, electronics, automotive and many others, shortening supply chains, reducing overall inventory, and increasing cash flow.

The clients problem: How to select the right solution

The bottleneck for product companies to implement this new strategy is how to understand, absorb and apply the correct solution to their specific production and distribution needs from a vast array of new options.

Because many design and distribution firms have historically outsourced, they are just beginning to develop in-house expertise to select and deploy automation solutions for their specific products and distribution channels. In house solution evaluators can become overwhelmed trying to match potential solutions to business specific challenges. No evaluator wants the risk purchasing “shelfware” or initiating a pilot program that never makes it to production.

The solution providers problem: How to market the right solution

Traditional marketing and selling approaches for automation equipment vendors has focused on trade shows, generic power point presentations, and canned demos. The problem lies in how to show a specific solution to a specific client's problem in a reasonable time frame at a reasonable cost. Sales people and applications engineers do not have the tools with which to show a client how their products and services can solve the specific needs of a given problem.

Given the rate of change, the gap between the evaluators understanding of the problem, and the vendors solution has grown quite large. Evaluators need to *see* a specific solution to their specific problem. Vendors need to *show* an evaluator a solution they can commit to delivering. Something needs to bridge that gap. Fortunately, there is a new approach.

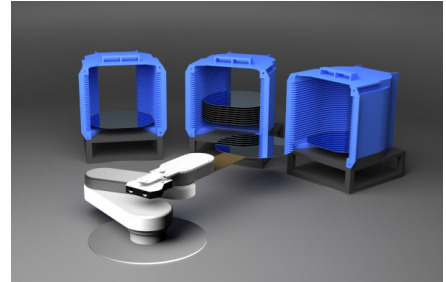
Visualizations bridge the gap between a clients problem and a vendors solution.

Definition of “to see”: *to form a mental picture of, to perceive the meaning or importance of.* Also, “Seeing is believing”.

Vendors need to visually present a solution, and for the client to *see and understand* how their problem will actually be resolved.

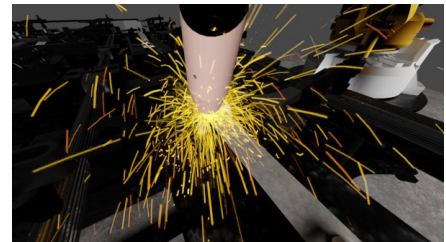
Vendors can now present a three dimensional “live” solution to a client, showing actual equipment solving a real problem with a real process. Visualizations allow the client to interact with the vendor. They can ask questions about things they can see.

With the advancement of digital 3d content development, the cost to create visualizations has now dropped below the cost of creating and editing traditional live videos. 3d development provides both technical and creative flexibility never before available to digitally customize the client experience, either for a specific market segment, or even for a specific application for a specific client.



Both client and vendor benefit

Visualizations create a framework for discussion between client and vendor. The automation vendor can easily specify how the visualization represents their solution, enabling them to craft the presentation of the solution. When a client sees a visualization, they have a mental framework for how to map that solution into how their business works. They now have something to react to, to ask questions, and to delve deeper into how the vendor can provide the value they need to leverage a new way of production and distributing their product.



The increased communication bandwidth shortens the time for evaluation and decision. Because greater understanding allows more up front questions about how things will work, it also lowers the likelihood of “shelfware”, and provides a framework for planning a production rollout. It allows the client to receive a commitment from the vendor for a solution to their problem. Both client and vendor benefit from the interaction, in ways that were not possible with previous evaluation techniques.

To learn more

If your team is looking for ways to lower costs and accelerate the process of evaluating or marketing automation solutions, contact Capnetix. With 35 years of experience in advanced automation, CAD design and systems integration, we can help you bridge the gap quickly and efficiently. We can show you working examples that allow clients and vendors to enter into a process that benefits both.

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Capnetix

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