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A **Broadcom** Company

Broadcom Set-top Box Accelerates Product Development with Clarity

Business

The Set-top Box (STB) group at Broadcom (NASDAQ: AVGO) is the worldwide leader in system-on-chip (SoC) solutions for video delivery.

Challenge

• STB has a stringent development process that spans multiple teams, vendors, and locations, and that simply cannot fail. The team was struggling with an outdated project portfolio management tool that was slow, ineffective, and lacking in critical work information, which made the gated process time-consuming and difficult to manage. The team was wasting time and effort on human coordination and communication to compensate for the ineffective tool.

Solution

• The STB operations team searched for a solution that was more flexible, but still had the strong governance that they needed. They selected Clarity, the leading digital project management solution for enterprise, because it modernizes gated-work delivery, centralizes status and data updates, and supports real-time decision-making.

Benefit

• Project creation time decreased by 70%, which improved client responsiveness. In addition, the STB group eliminated manual status reporting. As a result, they increased labor productivity by $200,000 a year, by eliminating excessive meetings.

Client Profile

Organization: Broadcom STB Group

Industry: Technology

Business

The STB group at Broadcom designs and builds video decoders/encoders that include embedded streaming processors, broadband cable modem solutions, and tuners/ receivers for cable TV, digital satellite, and terrestrial broadcasts.

Challenge

Developing and manufacturing microchips, such as the ones used in set-top boxes, is a complex business. At Broadcom, multiple teams across the globe work in sequence to complete a SoC, which comes with its own CPU, memory, storage and input/output ports.

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Challenge (cont.)

Each hand-off is carefully gated to eliminate errors and delays. A single mistake can be extremely detrimental from a revenue and market credibility standpoint.

"We manufacture multiple chips at any given time and are constantly moving," said Sean Hall, Principal Program Manager at Broadcom. "There's simply no room for error in our industry. So, we adhere to a very tight process."

To manage these rigid workflows, the STB team was using a legacy project management tool that did not meet their need to pivot projects quickly, collaborate throughout the delivery cycle, and proactively discover development blocks and shifting priorities due to manufacturing demands.

Because this legacy project management tool was so ineffective, the teams spent a great deal of time and energy compensating for it.

"We had to adapt the way we worked to support the tool; this was not efficient," said Hall. "For example, we couldn't effectively pull in or push out projects to meet changing business needs and were forced to use spreadsheets, emails, and phone calls as a workaround. This negatively impacted our ability to align engineering resources with key business outcomes."

Solution

The STB group evaluated the leading Clarity solution and selected it for its out-of-the-box new product development capabilities. The group found Clarity to be much more flexible. Yet, Clarity still provided the rigid governance that STB operations needed, especially a one-stop portal for cross-team access to status and data, and support for real-time decision making by planners and managers.

The Clarity user experience far exceeded other solutions with centralized collaboration, mature but accessible planning capabilities, easy manipulation of dates, and actionable analytics with intuitive and valuable functionality. Essentially, the STB team discovered how Clarity is designed to help companies simplify work and optimize resources, reduce risk, and guarantee as-promised delivery. STB is taking advantage of Clarity's key work delivery features:

- A 360-degree view of work, people, and financials
- Easy workflow management
- Modern in-app team collaboration
- Robust management of both labor and non-labor resources
- Industry-leading financial capabilities
- Real-time status of work, team, and budgets
- Multi-level road mapping

With centralized demand intake, work is quickly and effectively parceled out to the right teams based on client needs. Tasks and timelines are set with a few clicks. Teams collaborate in real time to remove blocks and guard against surprises in the development cycle. And, using a single platform, planners and management have a 360-degree view of the entire product portfolio.

Solution (cont.)

"The global team now has a central workspace and a single source of truth to deliver products," said Scott Blyler, application engineer at Broadcom. "Although we only went live a few months ago, the benefits are already becoming very apparent. We're planning to add more teams to Clarity to achieve greater business outcomes."

Benefits

With Clarity as its new-product-development solution, the STB group is flexible enough to spin up a right-sized-effort plan, every time that a new order arrives, with only a few clicks. Planners and management shift entire delivery cycles, resources, and priorities, ensuring that groups focus on the right business outcomes. The STB group is delivering products more efficiently, with better team collaboration and less latent information, but without compromising mission critical gated processes.

"The entire work cycle has improved, requests and communication are now centralized instead of floating around in emails and spreadsheets," said Hall. "Date delivery planning is shared, and status updates have zero latency."

Clarity's collaborative solution provides wider, more accurate, real-time visibility that has already eliminated inefficiencies, giving opportunities for greater collaboration across teams, and creating a happier, more focused group:

- Project creation time decreased by 70%, which improved client responsiveness.
- Status look-ups decreased by 80% with more data accelerating and improving delivery decisions.
- Staff meetings have been reduced by 75%, saving $200,000 in labor costs a year.

"With the old solution, the STB group had two weekly meetings, often with more than 30 people attending, lasting up to two hours each week," said Hall. "Meetings have been reduced to once every other week resulting in a savings of over $200K of labor costs, enabling the teams that attended those meetings to now spend time on other work priorities."

The entire work cycle has improved: Requests and communications are now centralized instead of floating through in-boxes. Date-delivery planning is shared, and status updates have zero latency. By centralizing task delivery, team collaboration, and reporting with Clarity's solution, the STB group is only beginning to realize business benefits. The group is investigating opportunities for further improvements in request intake, system integration, and additional analytics for planning.

Set-top Box achieved such great results that Broadcom is looking into how other business units can use Clarity.

For more information, please visit broadcom.com/ppm.

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