AUTODESK Construction Cloud

Construction Executive Council

Executive Summary



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Executive Summary Outline

Themes

- **Ecosystem & Collaboration**
- **Data & AI**
- **Trusted Partnership**

Session Summaries & Key Highlights

- **Driving Innovation & Ecosystem Alignment**
  - Trust in the Building Ecosystem Panel (Day 2)
  - Connecting Design & Construction: Forma (Day 1)
  - Connecting Design & Construction: AEC Data Model (Day 1)
  - STO BG Fireside Chat (Day 1)

- **Empowering Data & AI**
  - AI & Autodesk (Day 2)
  - AI in Construction (Day 2)

- **Fostering Trusted Partnerships**
  - Trusted Partnership Fireside Chat (Day 1)
  - Customer Impact Session (Day 2)
  - Construction Leadership Open Forum (Day 2)



Themes

Ecosystem & Collaboration

Data & AI

Trusted Partnership

Ecosystem & Collaboration

Connecting across the entire project lifecycle, including design, construction, and manufacturing, is essential for breaking down silos and enhancing efficiency. By focusing on integrated workflows and promoting collaboration, industry leaders can help promote seamless data transition and improved project outcomes. Encouraging partnerships and clear communication plans further support this collaborative environment.

We need to transform the way we work in this industry. Finding a balance between our transformation and the industry's transformation is crucial. I hope the journey will be challenging for us together because that means it will truly transform the industry. We understand that sometimes you need to say no if something doesn't make sense or isn't on the roadmap. My ask is to please transform the way we work.







Data & AI

Data serves as the foundation for advancing AI and digital transformation in the construction industry. Ensuring data is precise, interoperable, and accessible allows for better decision-making and innovation. Leveraging AI empowers teams to optimize processes, gain actionable insights, and achieve more with less, supported by robust data management and educational initiatives.

Humans tend to overestimate the short-term impact of technology and underestimate its long-term effects. AI might not revolutionize overnight, but it will profoundly change how we work over time.







Trusted Partnership

Building trust through transparency, capability, and proactive engagement is crucial for fostering long-term partnerships in the construction industry. Aligning goals and maintaining open communication help promote mutual success and innovation. Emphasizing data privacy and responsible AI use further strengthens these trusted relationships, supported by responsive and reliable customer support.



Building trust through transparency, capability, and proactive engagement is crucial for fostering long-term partnerships in the construction industry. Aligning goals and maintaining open communication help promote mutual success and innovation.

I have been working with you for over 20 years, and I think you are a great company. It takes time to truly appreciate how innovative Autodesk is. You have some of the most brilliant minds in the software industry and have invested significantly in transforming the platform. – Tomislav

Ecosystem & Collaboration

Connecting Design & Construction: Autodesk Forma

Amy Bunszel, Executive Vice President of AEC Solutions, delivered an insightful session on **Autodesk Forma**, showcasing its role in the broader vision of industry clouds for the AECO sector. She outlined Autodesk's strategy to tackle industry challenges, enhance productivity, and drive innovation by closely integrating user feedback into product development. Amy also shared plans for organizational optimization in the coming year, emphasizing Autodesk's commitment to ease of use and reducing friction in tools.

Takeaways

Industry Clouds Vision: Introduction of Fusion, Form, and Flow as the future industry clouds with Form specifically for the AEC industry.

Balancing Short and Long-Term Goals: Autodesk is focused on delivering immediate value through tool enhancements while investing in transformative, future-oriented projects.

Focus on Collaboration and Connectivity: The session reinforced the value of connecting peers to help bridge the gap between design and construction through shared insights and Autodesk's strategic initiatives.



Ecosystem & Collaboration

Connecting Design & Construction: Autodesk Forma

Customer Sentiment

Excitement Around Future Vision: The industry cloud strategy, anchored by Autodesk Forma, resonated as a forward-thinking solution aligning with AEC industry needs.

Positive Response to User-Centric Strategy: Attendees appreciated Autodesk's emphasis on leveraging customer feedback as a driver for innovation and decision-making.

Challenges

Enhanced Marketing Efforts: Customers requested improved marketing strategies to demystify the concept of the combined ecosystem and better communicate the innovative aspects of Autodesk tools to the broader industry.

Focus on Ease of Use: Continued emphasis on making tools more user-friendly and reducing friction in daily tasks.



Ecosystem & Collaboration

Connecting Design & Construction: AEC Data Model

This session on the AEC Data Model followed the Autodesk Forma presentation, reinforcing the theme of driving industry-wide efficiency through innovation and collaboration.

Challenges and Vision

Uniform Data Handling: The AEC industry faces hurdles with varying data standards. Autodesk's strategy centers on creating a uniform approach to data across platforms like Revit and AutoCAD, transitioning from file-based systems to granular data management.

Granular Data: The concept of granular data goes beyond fragmenting files—it involves understanding how data is stored, connected, and leveraged across repositories. This approach reduces redundancy, streamlines updates, and improves workflows.

Strategic Enhancements and Tools

Data Connectors and System Integration: Autodesk highlighted the importance of connectors to help aggregate and synchronize data across disparate systems, even as the AEC data model evolves.

Asset ID Consistency: Managing asset identifiers across models helps promote consistency, tracks changes, and maintains a seamless flow of information.

Portfolio Investments: Recent acquisitions like Unify (now a content catalog) and Datum 360 underscore Autodesk's commitment to cleaner, more standardized models. These tools, such as CLS 360 and PIM 360, enable organizations to better support compliance, manage classifications, and reduce data inconsistencies.

Driving Quality and Compliance

Content Preparation: Properly prepared content help promotes better quality outputs, aligning with Autodesk's push for standardization and precision.

Compliance Automation: With increasing government reporting requirements, automation tools play a crucial role in managing extensive data parameters, helping to save time and ensuring accuracy.

Ecosystem & Collaboration

Workshop: Mapping the Data Ecosystem

Participants were encouraged to evaluate their data environments, identify gaps, and consider standardization preferences. An interactive exercise on data mapping provided practical insights into improving workflows.

Takeaways

The session reinforced Autodesk's dedication to creating a connected and comprehensive data ecosystem for the AEC industry, aligning with the broader vision of industry clouds.

Investments in data tools and standards are designed to improve both short-term workflows and future-proof data management strategies.

Collaboration and customer input remain at the forefront, ensuring Autodesk's solutions are aligned with real-world challenges and opportunities.





Ecosystem & Collaboration

Trust in the Building Ecosystem

Customer panel

This discussion underscores the interconnectedness of technology, trust, and human collaboration in advancing outcomes for all ecosystem stakeholders.



*I was just talking to our team yesterday about how much they value the **connector concept**. When we talk about Autodesk Construction Cloud (ACC), it's not a monolith for us on the user side. Each of us has our own accounts, responsibilities, and tools. A better analogy is that it's not a cloud—it's a **constellation**.*

Takeaways

Integration and Interoperability:

- Key to minimizing miscommunication and ensuring a unified platform for collaboration.
- Reduces project errors and strengthens stakeholder trust through seamless data flow.

User Experience:

- Intuitive and user-friendly tools are vital for widespread adoption and effective collaboration.
- Balancing functionality with ease of use democratizes access to technology.

Balancing Technology and Human Interaction:

- Technology should complement human expertise and foster relationships rather than replace them.
- Trust and collaboration are strengthened when the human element is prioritized.

Trust and Transparency:

- Transparency across the project lifecycle minimizes surprises and reinforces long-term client relationships.
- Strong trust enables innovative design solutions and enhances overall outcomes.

Customer-Centric Impact:

- Leveraging technology and transparency directly improves project efficiency, satisfaction, and client confidence.

Ecosystem & Collaboration

Trust in the Building Ecosystem

Customer panel

Customer Sentiment:

Appreciation for Transparency: Involvement and open communication enhance trust and increase the likelihood of repeat business.

Value in Expertise and Innovation: Clients trust innovative solutions when the team demonstrates transparency and capability.

Efficiency Gains: Advanced tools like AI are highly regarded for risk mitigation and delivering projects more effectively.

Stakeholder Priorities:

General Contractors:

- Need for seamless data integration to help promote project alignment and error reduction.
- Dependence on transparency for building client trust and securing repeat business.

Subcontractors:

- Importance of user-friendly tools for collaboration and inclusivity across teams, ensuring to keep the end-users in the field top of mind.
- Use of AI for risk management and improved project delivery.

Designers:

- Trust and transparency enable bold, innovative solutions that benefit both clients and firm reputation.
- Emphasis on balancing creative freedom with client satisfaction.

Focus Area:

Enhance Data Systems: Invest in systems integration to bridge silos and improve real-time access to information.

Simplify Technology: Prioritize usability in tools to foster greater adoption across technical skill levels.

Retain Human-Centric Approach: Use technology as a tool to empower human decision-making and relationship building.

Foster Transparency: Build trust through clear communication and early issue resolution throughout the project lifecycle.

Expand Technology Utilization: Leverage AI and other advanced tools for enhanced project forecasting and execution efficiency.

Ecosystem & Collaboration

Fireside Chat with STO Building Group

Jim Donaghy, Executive Chairman

The final session of day one was a fireside chat that between Sid Haksar and Executive Chairman of STO Building Group, Jim Donaghy. The session was an in-depth exploration of STO Building Group's strategic vision and long-term investments to sustain growth and innovation in the construction industry. Jim shared key insights into the company's transformation from a $200-$300 million business to a $12 billion enterprise, emphasizing the importance of maintaining core values, fostering innovation, and prioritizing client relationships.

Takeaways:

Strategic Growth: The session discussed Jim's role in STO's approach to growth, including forming alliances with local competitors to expand geographically, building partnerships that often led to mergers, and introducing an employee stock option program to align team goals.

Technology & Sustainability: The integration of advanced technology and sustainability initiatives into STO's operations was emphasized as critical to staying competitive.

Cultural Foundation: The session underscored the importance of preserving a strong, value-driven culture while navigating rapid growth. Jim shared how his leadership journey began after succeeding his father, forming a cohesive team that has steered the company through decades of success.

Industry Challenges & Opportunities:

Labor & Material Issues: The session addressed the industry's labor shortages, material price increases, and inflation, with STO's response centered on diversity, workforce development, and strategic alliances.

Attracting Talent: There is a need to make construction careers attractive amidst competition from tech giants like Google and Autodesk, noting Autodesk's significant contribution as an R&D lab for the industry

Ecosystem Collaboration:

The session addressed the industry's labor shortages, material price increases, and inflation, with STO's response centered on diversity, workforce development, and strategic alliances.

Trusted Partnership

Fireside Chat

The fireside chat centered on fostering trusted partnerships and delivering measurable customer value through collaborative efforts and strategic customer success management. It highlighted the evolving roles of Customer Success Managers (CSMs), the importance of aligning with customer goals, and emerging trends in industry collaboration. This session reinforced the power of collaborative dreaming and thoughtful execution in building trusted partnerships that drive meaningful outcomes.

Takeaways

Value-Driven Approach:

- Shift from consumption-driven metrics to customer-verified value.
- Emphasis on articulating customer goals and outcomes clearly.
- Development of success plans with regular progress reviews to help promote measurable outcomes.

Role of CSMs:

- Facilitate adoption and tangible outcomes by asking the right questions.
- Drive customer accountability and ownership in achieving success.

Optimizing Product Use:

- Focus beyond activation and onboarding to long-term value optimization.
- Structured rollouts that engage stakeholders and streamline workflows.

Trusted Partnership

Fireside Chat

Collaboration and Innovation

Joint Ventures (JVs):

- Rise importance of collaboration between traditionally competitive entities.
- Creation of a specialized ecosystem team within Autodesk to support JV projects.
- Provision of democratized data insights for collaboration while protecting IP.

Cultural Shifts:

- Reevaluating the scope of intellectual property to enable faster innovation.
- Encouraging a mindset shift to identify foundational versus differentiating IP.

Customer Sentiment

- Optimistic about structured and measurable approaches to achieving outcomes.
- Excited by the possibility of collaborative innovation in joint ventures.
- Appreciative of Autodesk's initiatives to align technology with their evolving needs.



Trusted Partnership

Customer Impact Session

Lalith Subramanian kicked off the Customer Impact session with his reflection on the past two years at Autodesk. This shift from traditional 2D and 3D methods to augmented reality (AR) represents a broader trend towards innovative solutions across construction. Lalith explored his team's key pillars: Connected Workflows, Design & Construction, Data & Intelligence.

Connected Workflows:

- Highlighted the need for seamless data flow across design, construction, and operational stages, while respecting legal and contractual boundaries to help promote smooth data exchange and orchestration.
- Underlined resiliency & trust as essential for software reliability, ensuring constant availability and functionality. Significant strides have been made in proactive monitoring, quicker response times, and platform stability.
- Stressed the importance of an API-first approach for data exchange and orchestration, enabling seamless integration with external systems and custom reporting functionalities.

Design and Construction:

- Focused on reducing inefficiencies by streamlining transitions from design models to project management stages, improving granular data handling, and minimizing workflow friction.
- Outlined the outcome framework for determining feature development, centered on business growth, cost management, schedule efficiency, and quality. Discussed pressures and value metrics that inform feature prioritization.

Data & Intelligence:

- Draws parallels with Salesforce's evolution, stressing the value of leveraging historical project data to drive actionable insights and ongoing improvements.
- Emphasized the importance of responsible data stewardship, focusing on security, privacy, and ethical AI use to foster trust with users.
- The focus on AI for intelligent data retrieval and insights ties into the broader objective of leveraging data for actionable insights. Customer engagement in shaping the roadmap help promotes that data intelligence is effectively aligned with real-world needs, driving personalized experiences and informed decision-making.

Trusted Partnership

Autodesk Construction Leadership

Q&A Session

This session demonstrated Autodesk's commitment to listening to its customers and taking actionable steps to address their needs while staying aligned with future industry trends. Overall customer sentiment is positive with high confidence in Autodesk's potential as a leader in construction innovation and sustainability. There is opportunity to address gaps in market-specific solutions and a need for robust implementation timelines.

Enhance Integration:
Expedite development of APIs for seamless workflow across tools and platforms.

Prioritize Education Partnerships:
Strengthen relationships with STEM, trade, and union organizations to build the next-generation workforce.

Sustainability Tools:
Expand resources to help customers achieve environmental targets.

Stay Agile:
Address customer parity gaps while continuing to innovate to maintain market leadership.

Building Trust in the Construction Ecosystem:

- Customers value *trust and transparency* in workflows, especially concerning data sharing and responsibility.
- Strengthened focus on partnerships with educational institutions to address workforce development challenges early, from middle school to trade schools and unions.
- Investment in cross-platform integrations to deliver connected, reliable solutions.

“The biggest threat is complacency. We've made great progress, but now is the time to differentiate ourselves.”

Data & AI

Building Trust in AI - Autodesk

This session highlighted Autodesk's approach to AI policy and integration, emphasizing trust as a core principle. It detailed how Autodesk is navigating AI adoption across diverse industries, balancing innovation, transparency, and ethical considerations.

Takeaways

AI Framework as a Foundation:

- Autodesk leverages established frameworks as a "North Star" to guide the creation of AI principles tailored to its diverse customer base.
- The framework is adapted for different industries (e.g., safety in construction vs. creative content in media).

Tailor AI Policies:

- AI use cases, like GitHub Copilot for coding, undergo case-by-case evaluations to help promote compliance with Autodesk's policies.
- Boundaries are established for ethical and more secure AI usage across workflows.

Collaborative Ecosystem:

- Autodesk actively engages with partners in its open data environment, sharing best practices to foster trust and collaboration.
- Participation in consortia (e.g., NIST) allows Autodesk to influence regulatory standards and advocate for responsible AI.

AI Research and Innovation:

- Initiatives like Project Bernini showcase Autodesk's commitment to solving real-world challenges in the AEC industry and beyond.
- Insights from research inform internal policies and benefit industry partners.

Customer Sentiment

Trust and Transparency: Customers value Autodesk's focus on transparency and ethical AI development, viewing it as critical to maintaining trust.

Alignment with Needs: Tailoring AI policies to better meet industry-specific concerns resonates with customers, reinforcing Autodesk's commitment to their success.

Proactive Leadership: Autodesk's active role in shaping AI regulations and best practices positions the company as a forward-thinking and trusted partner.

Data & AI

AI in Construction

This session provided an in-depth exploration of how Autodesk is leveraging AI to enhance construction workflows, aligned with insights from the **2024 State of Design and Make Report**. The discussion highlighted Autodesk's strategic vision, real-world applications, and roadmap for AI-driven tools that improve decision-making, productivity, and outcomes in the construction industry. This session underscored Autodesk's commitment to revolutionizing construction workflows through innovative AI solutions, while reinforcing the collaborative approach essential for success.

Takeaways

AI Maturity Curve: Autodesk is advancing AI from enhanced data access to driving actionable insights and optimizing outcomes. Key features include proactive alerts, change analysis, and real-time updates for improved efficiency.

Integrated Tools: AI insights are being embedded into project management tools, enabling users to query project data, models, and documents using natural language.

AI Research and Development: Ongoing research includes integrating granular model data into databases and exploring natural language models to enhance usability and accessibility.

Dynamic Data Challenges: AI solutions are addressing inconsistencies in project data, such as specifications and change management, while emphasizing synchronization and real-time updates.

Risk and Workflow Automation: AI-driven risk analysis and pattern detection simplify management of vast datasets, while tools like master schedule integration streamline planning and execution.

Collaborative Development: Autodesk emphasized the importance of user feedback in prioritizing AI advancements, including areas like cost modeling, safety risk analysis, and value-based decision-making.

AI priorities: risk management, change order automation, and cost modeling.

Stakeholder Collaboration: Foster ongoing dialogue with users to help promote AI developments address evolving needs in construction workflows.



"Humans tend to overestimate the short-term impact of technology and underestimate its long-term effects. AI might not revolutionize overnight, but it will profoundly change how we work over time."

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