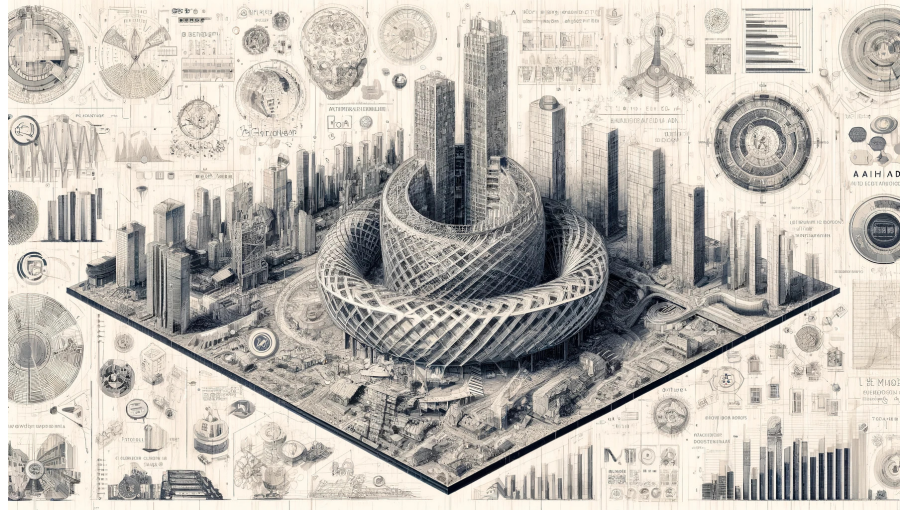
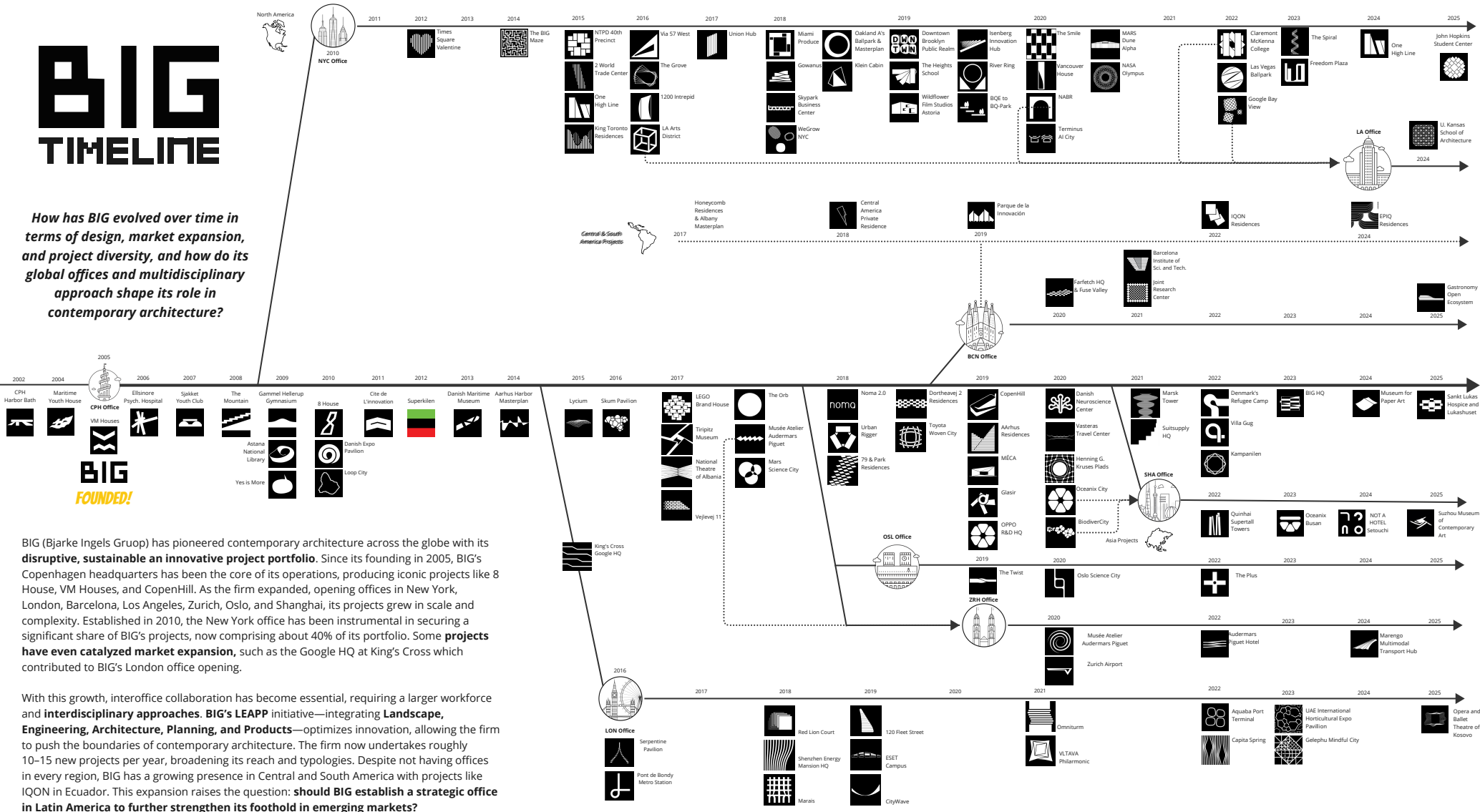


How can Bjarke Ingels Group harness AI to enhance efficiency across its branches, strengthen its sustainable approach, and keep generating value while navigating industry challenges, global risks, and disruptions brought by this emerging technology?



BIG TIMELINE

How has BIG evolved over time in terms of design, market expansion, and project diversity, and how do its global offices and multidisciplinary approach shape its role in contemporary architecture?



BIG (Bjarke Ingels Group) has pioneered contemporary architecture across the globe with its **disruptive, sustainable and innovative project portfolio**. Since its founding in 2005, BIG's Copenhagen headquarters has been the core of its operations, producing iconic projects like 8 House, VM Houses, and CopenHill. As the firm expanded, opening offices in New York, London, Barcelona, Los Angeles, Zurich, Oslo, and Shanghai, its projects grew in scale and complexity. Established in 2010, the New York office has been instrumental in securing a significant share of BIG's projects, now comprising about 40% of its portfolio. Some **projects have even catalyzed market expansion**, such as the Google HQ at King's Cross which contributed to BIG's London office opening.

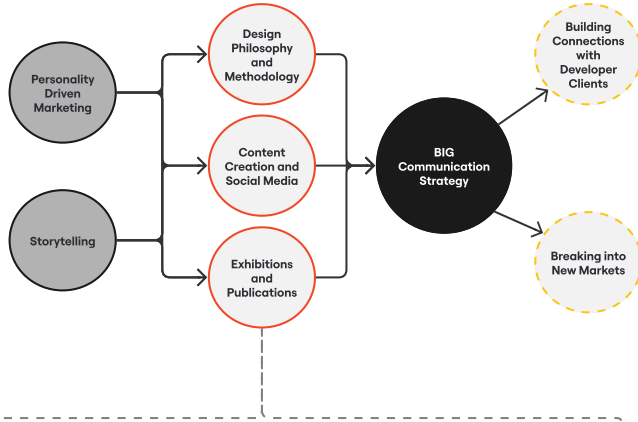
With this growth, interoffice collaboration has become essential, requiring a larger workforce and **interdisciplinary approaches**. BIG's **LEAPP** initiative—integrating **Landsc**ape, **Eng**ineering, **Arch**itecture, **Pl**anning, and **Pr**oducts—optimizes innovation, allowing the firm to push the boundaries of contemporary architecture. The firm now undertakes roughly 10–15 new projects per year, broadening its reach and typologies. Despite not having offices in every region, BIG has a growing presence in Central and South America with projects like IQON in Ecuador. This expansion raises the question: **should BIG establish a strategic office in Latin America to further strengthen its foothold in emerging markets?**

BIG PHILOSOPHY

How does **BIG's design philosophy, ethos, and communication strategy** shape its architectural approach and influence its impact on the built environment?

BIG is more than an architecture firm—it's a design-driven think tank redefining urban living through **innovation, storytelling, and strategic communication**. Rooted in its **YES IS MORE** philosophy, BIG embraces today's global challenges with a determination to shape a socially, economically, and environmentally driven future as a practical objective. By **pushing the boundaries of typology, architectural form, master planning concepts, sustainability, and product design**, BIG transforms futuristic ideas into a built reality.

Architectural storytelling has been key to BIG's success, using platforms like YouTube, TED Talks, *Abstract* on Netflix, exhibitions, and publications to make complex ideas compelling. Ingels has redefined architectural communication, creating relatable content that engages both professionals and the public. His ability to present projects through dynamic visual storytelling—whether in videos, lectures, or presentations—has **expanded BIG's global influence, secured major commissions, opened new markets, and strengthened client relationships**. This strategic approach positions BIG as both accessible and pioneering, bridging architectural vision with commercial viability.



Publications

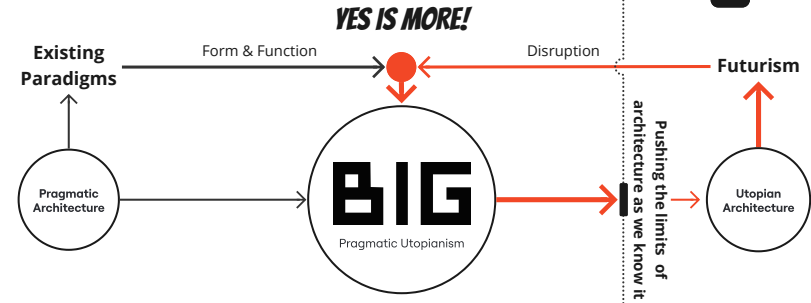
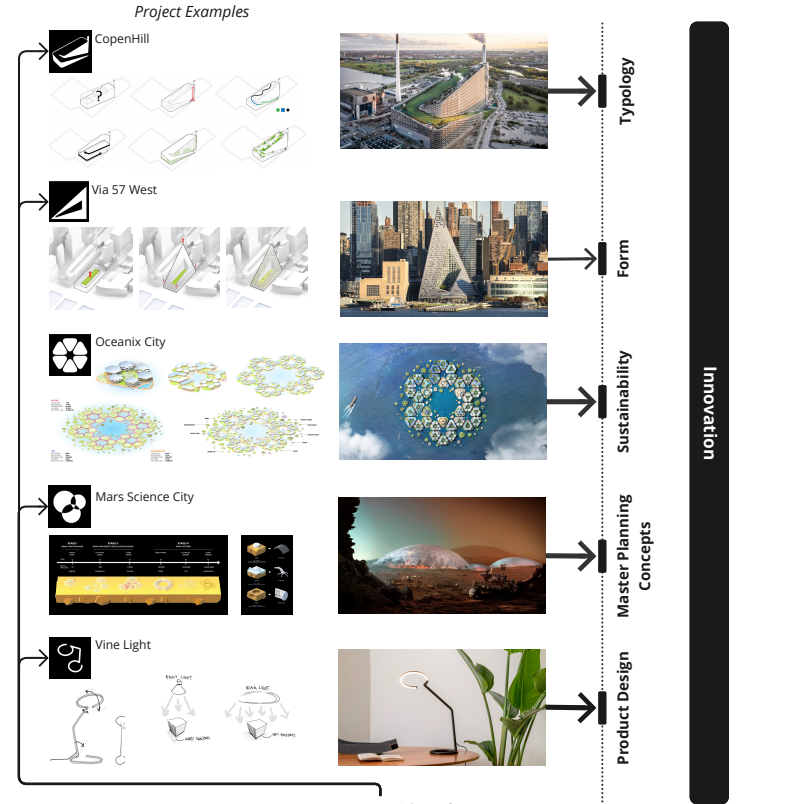
- YES IS MORE
- SUPER BLECH
- au
- 274 Publications
- 43 Publications
- 374 Publications
- 336 Publications

Exhibitions

- 2007-BIG City
- 2009-Yes is More
- 2010-Yes is More
- 2014-The Big Maze
- 2015-HOT TO COLD
- 2017 BIG Art
- 2018-Formgiving

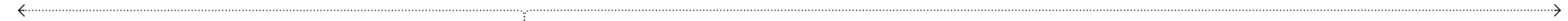
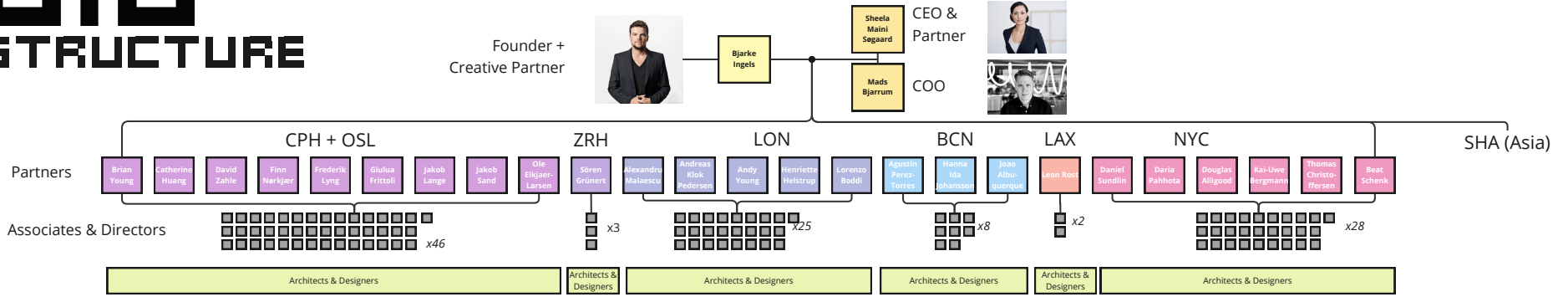
Media

- Instagram
- LinkedIn
- Facebook
- X
- YouTube
- TED Ideas worth spreading
- Abstract



BIG STRUCTURE

How does BIG's decentralized and collaborative business structure contribute to its global success, and what are the advantages and challenges of its approach to fostering innovation and adaptability?



BIG Offices in London



BIG Headquarters in Copenhagen



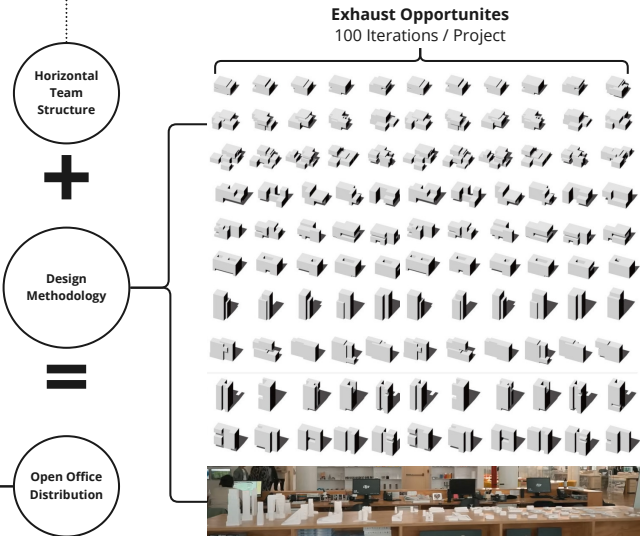
BIG Offices in Los Angeles



BIG Offices in Barcelona



BIG Offices in New York City



BIG has cultivated a unique, **horizontally structured organization** that balances talent and culture around creative collaboration. Partners and senior designers remain accessible to all team members, fostering a **"true meritocracy"** where ideas are valued for their impact rather than their source. As COO Sheela Søgaard explains, *"Everyone hears everything directly from whoever said it,"* ensuring open and transparent communication across the firm.

BIG's organizational approach allows the firm to integrate diverse cultural perspectives, essential for its global success. With over **30 nationalities in its team of over 700 people**, projects are designed with both global relevance and local sensitivity. Open office layouts further reinforce collaboration, promoting open ideation and fluid teamwork.

BIG's design methodology revolves around an **iterative process**, exploring nearly 100 design variations to refine each project and **exhaust opportunities**. This approach is reinforced by a firm-wide culture that encourages open dialogue and collaboration, allowing architects at all levels to contribute to the evolution of ideas. The **open office layout** in all BIG offices is intentionally designed to support this exchange, reflecting the firm's philosophy, design process, and business structure.

BIG-SWOT

What strengths, weaknesses, opportunities, and threats does BIG face in today's global and technological landscape, and how can the firm strategically position itself for continued success?

Strengths

■ Global Prestige

- Cutting-edge **design portfolio**
 - Diverse project range
 - Success in Typology mixtures
- Effective **communication strategy**.
- **Collaborative & interdisciplinary** approach.
- **Institution Credibility** for their built projects.
- **Strategic Expansion & Market Adaptability**

▲ Sustainability Approach

- Energy-efficient & carbon-reducing architecture.
- Resilient and sustainable city planning.
- **Circular economy** driven approach & low-carbon materials on several proposals.
- **Sustainable housing & social responsibility**.

● Technology & Innovation Driven

- Strong **computational design** approach
 - BIM implementation
 - **Generative design** practices & **parametric design**
- **Digital fabrication and prefabrication**
- Smart & responsive **building technologies**

Internal Origin

Opportunities

■ Emerging Markets

- Accelerated **urban growth** & infrastructure needs.
 - 90% of global urban population growth will occur in **Asia, Africa and Latin America**.
- **Developing countries** like Mexico, Brazil, India, and Nigeria are investing heavily in **affordable housing, smart cities**.

▲ Sustainable Development

- **Sustainable Development Goals (SDGs)**
 - Government Policies & Financial Incentives
 - Corporate & Investor Shift Toward ESG
- **Peak Fossil Fuel Demand:** The IEA projects that the demand for fossil fuels may peak before 2030, indicating a significant shift towards **renewable energy sources**.

● Arrival of AI

- **Enhanced Creativity and efficiency** in AEC industry.
 - Task optimizations
 - Possibilities to explore further iterations for improved design.
- **Decrease in project times** could open opportunity to further project participation.
 - Documenting and drafting automatization
 - Design and engineering optimization tools.

External Origin

■ Resource Allocation

- BIG's rapid expansion:
 - **Numerous project intakes** require efficient resource management.
- Talent & Workforce Distribution:
 - 700 employees require efforts in quality supervision.
- **Cost overruns** in large-scale projects (e.g., infrastructure or experimental designs) can strain profitability.

▲ Allegations for Greenwashing

- Criticism for prioritizing aesthetics over genuine environmental benefits.
 - Sustainability claims must be backed by measurable impact to avoid reputational risks.
- **Hedonistic Sustainability** promotes ecosystem-driven design, but critics question its feasibility.

● Project Complexity

- **Complex geometries and ambitious scopes.**
 - Increased construction costs and extended timelines.
- **Diverse project locations** limits the capacity of construction and design supervision.
- Overcomplexing questions the priority of form and function

■ Economic Uncertainty, Fluctuations

- AEC industry is sensitive to **economic cycles**.
- Impact on **geopolitical conflicts**.
- The **housing crisis** generated a shortage of affordable homes and escalating construction costs.
- Strong **competition** with other AEC firms.
- **Regulatory Challenges** due to volatility in public policies worldwide.

▲ Global Warming & Climate Change

- Increased frequency of **extreme weather events**.
- **Supply chain disruptions** and material challenges.
- **Regulatory pressures** and the push for sustainable practices.

● Arrival of AI

- Accessibility to intelligence will force us to rethink of our **relationship with AEC clients**.
- **Job Automation** and Skill Displacement
- **Competition** with smaller AEC teams harnessing AI and achieving similar results.
- Possibility of **losing human touch** to design.

Weaknesses

Threats

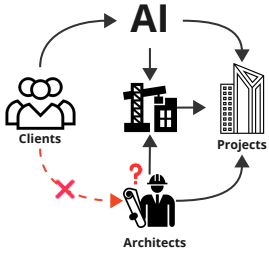
AI CONTEXT

How is AI transforming the architectural profession, and what fundamental shifts does it introduce in the roles, processes, and creative potential of architects?

AI is revolutionizing architecture, merging human and technological intelligence in design. Historically, architects have adapted to new tools, from hand drafting to CAD, 3D modeling, BIM, and now AI-driven computational design. Today, AI optimizes workflows by generating rapid image conceptualization, automating repetitive tasks, refining spatial configurations, and providing data-driven sustainability insights. This allows architects to shift from technical execution to strategic thinking and user-centered innovation. **AI-powered generative design**, predictive analytics, and real-time simulations amplify creativity, accelerating iteration and refinement. Moreover, AI fosters **interdisciplinary collaboration**, integrating architecture with data science, environmental engineering, and material innovation to create adaptive, efficient, and sustainable buildings. As a result, **architects are evolving into curators of intelligent systems**, balancing computation with intuition, ethics, and storytelling to shape the cities of tomorrow.

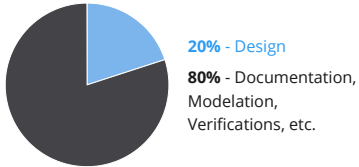
What the Industry Fears & Faces

The question of **what is the relationship between architects and clients rises**, due to task automatization that AI might start to develop and possibly replacing their role in the industry.



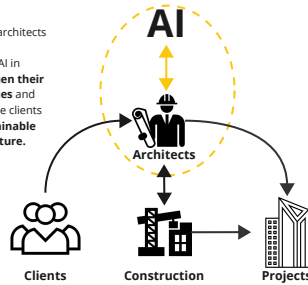
In consequence, this means that not only would there be an **obsolescence in the human skill**, but that building designs might be flawed because they lack **the human factor**, and aren't curated by human intelligence.

Time Distributing



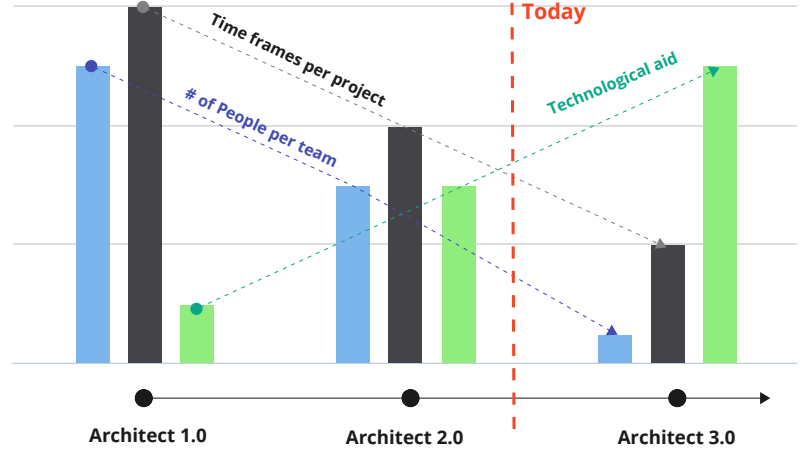
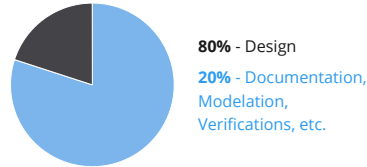
What the Industry Must Aim At

The world needs architects to maximize their relationship with AI in order to **strengthen their design possibilities** and embark even more clients in need of a **sustainable and equitable future**.



To fully expand our possibilities as architects, **expanding our capabilities with the aid of AI and evolving into project curators of intelligent systems** we can tackle even more solutions for our built environment.

Time Distributing



Architect 1.0

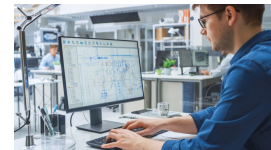
- Big design teams (20-40 people / project)
- Limited amount of project intake
- Longer time frames for design & construction phases
- Manual work and hand drawn documentation.

Architect 2.0

- Medium design teams (3-8 people / project)
- Increased project intake capacity
- Smaller timeframes because of AEC industry advancements, but increase in project sophistication and complexity
- First computer aided design:
 - 2D and 3D Modeling
 - Building Information Modeling (BIM)

Architect 3.0

- Small design teams with high technological capacity and AI aid (2 people / project)
- Design & Construction phases are fully optimized with the aid of Generative Design and AI.
- Fusion of Human Powered and AI design







Organizations are betting big on AI

In the past 3 years, **27% of organizations** have strongly increased their investments in AI and emerging technologies. **Increasing to a 32% in the next 3 years.**

AI THREATS

How might AI reshape AEC industries over the next five years, and what challenges could arise in terms of creativity, job roles, and the overall design process?

	 Job Automation & Skill Displacement	 AI-Powered Competition	 Data Privacy & Security Concerns	 Over-reliance on AI in Design Process	 Regulatory & Ethical Challenges in AI Integration
Threats	AI tools, such as generative design and automated drafting, can replace tasks typically performed by humans. For example, AI can quickly generate design options based on set constraints, accelerating the design process and minimizing manual labor.	The emergence of AI design tools may intensify competition in the AEC market. Firms lacking advanced AI may struggle against those using it for faster, efficient designs. Smaller firms could gain an edge by adopting AI early, threatening established firms like BIG.	As AI tools integrate into AEC firms, reliance on data-driven solutions may expose sensitive project data and client information to security risks. AI algorithms need large data sets, firms must implement data governance policies to protect client confidentiality and comply with privacy regulations.	AI enhances creativity but may hinder architecture's intuitive, cultural, and emotional aspects. Over-reliance could lead to efficient yet impersonal designs, risking the loss of human touch and creative depth.	AI advances faster than regulations, raising ethical concerns in architectural design. Firms must ensure AI avoids bias, promotes diversity, and adheres to ethical standards.
Impact on BIG	As AI advances in parametric design and BIM, job displacement may rise, affecting draughtspeople, junior architects, and project managers. AI streamlines tasks like revisions and planning, reducing entry-level roles and shifting skill demands.	BIG must adapt to AI-driven design to stay competitive against agile, tech-driven startups. While AI boosts creativity, integrating it requires overcoming resistance and investing in technology and training.	BIG must securely manage AI-driven design data, ensuring compliance with GDPR and global regulations. Failure to protect sensitive data could lead to legal, financial, and reputational risks, as well as potential AI vulnerabilities.	BIG values creativity, boldness, and cultural relevance. While AI optimizes design, over-reliance risks diluting its identity. The firm must ensure AI remains a tool, not the creative driver.	Regulators emphasize AI ethics, requiring fairness, accountability, and transparency. BIG must adapt to evolving rules, address bias concerns, and ensure socially responsible, inclusive designs.
Broader Industry Impact	The World Economic Forum estimates that AI may displace around 85 million jobs globally by 2025 in sectors like architecture, engineering, and construction. However, new roles requiring advanced skills in AI management could emerge, relying significantly on investment in retraining and upskilling within the AEC industry to stay competitive.	Smaller firms may adopt AI faster, cutting costs, design time, and improving quality, challenging traditional firms. This could drive market fragmentation, forcing larger firms to adapt, diversify, and invest in AI to stay competitive.	AI data breaches are a growing concern in AEC. Companies are adopting cybersecurity tools as construction sector losses could hit \$10.5T annually by 2025. Firms neglecting secure AI risk major data threats.	AI may streamline tasks but could diminish personalized design and artistic expression. Clients seeking unique, culturally rich designs may avoid firms that overuse AI-driven, formulaic solutions.	Stricter AI regulations may slow adoption and increase compliance costs. Issues like AI bias in housing design could lead to legal challenges and reputational risks for firms.

So what?

AI is reshaping the AEC industry, presenting both opportunities and challenges for firms like BIG, known for creativity and design integrity. **Job automation, competition from tech-driven startups, and data security risks** require firms to adapt quickly. To stay competitive, BIG must **turn AI into a competitive advantage** to enhance, rather than replace, human-centric design. By investing in new tools and **upskilling its workforce**, the firm can leverage AI as an advantage while carefully managing the risks and ethical concerns that come with it.

AI also offers an opportunity to expand capabilities and take on a wider range of projects due to its efficiency potential. With global challenges like **the housing crisis, climate change, and rapid urbanization, AI can address these issues at scale**—if properly harnessed. The real risk lies not in AI itself but in architects failing to evolve alongside it. **Strategic adoption, education, and ethical implementation** are crucial to ensuring AI acts as a catalyst for progress, not disruption.

AI + BIG = ?

In what ways can AI enhance design efficiency, sustainability, and business performance in architecture, and how can firms like BIG leverage these advancements to remain at the forefront of the industry?

AI is reshaping the AEC industry by introducing efficiency, precision, and adaptability across design, construction, and operations. **Generative Design** with AI is revolutionizing architectural design by allowing architects to input constraints and receive optimized design options in seconds. Tools like Midjourney, Stable Diffusion, and Autodesk Forma help firms iterate through **several iterations in short timeframes**. Additionally, AI-driven generative tools streamline processes like code compliance, allowing architects to explore optimized solutions more quickly and with greater precision. Construction is being aided through AI-assisted robotics, predictive scheduling, and real-time safety monitoring, reducing delays, costs, and risks. In operations, AI is enhancing energy efficiency, predictive maintenance, and space utilization, ensuring buildings remain adaptive and sustainable throughout their lifecycle.

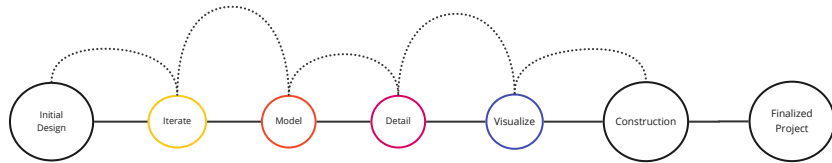
Firms like BIG can maintain a competitive edge by embracing AI tools, upskilling teams, and leveraging data-driven insights to enhance creativity, streamline workflows, and drive innovation. By **integrating AI driven generative design holistically into BIG's design process**, AI-powered visualization and modeling can be embedded early in BIG's design process, accelerating iterations and optimizing timeframes. In later construction phases, AI-assisted fast-track methods can improve information workflows and support real-time decision-making on-site. **BIG's design philosophy upon the arrival of AI is an opportunity to can maximize their vision** to keep pioneering design and innovation.

Generative Design Process

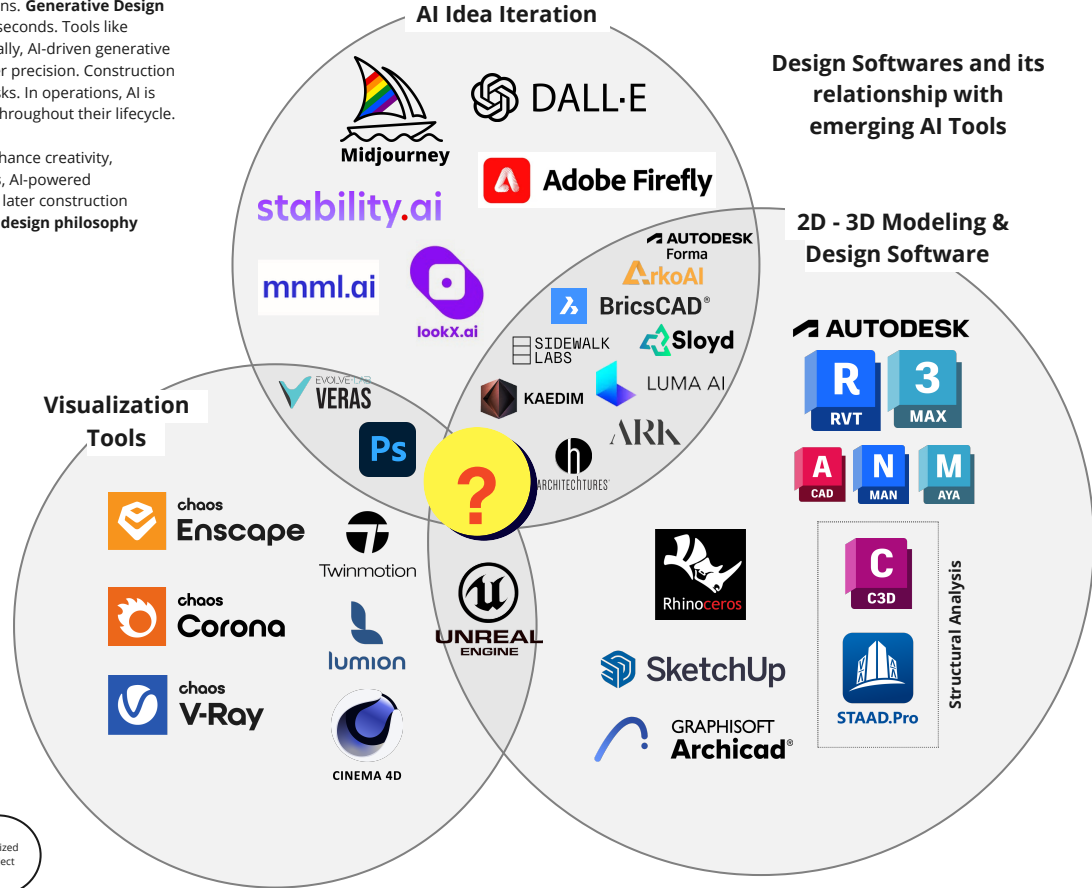
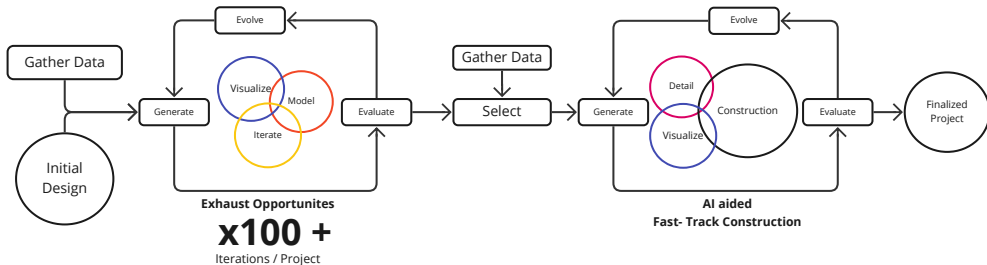


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BIG Design Process



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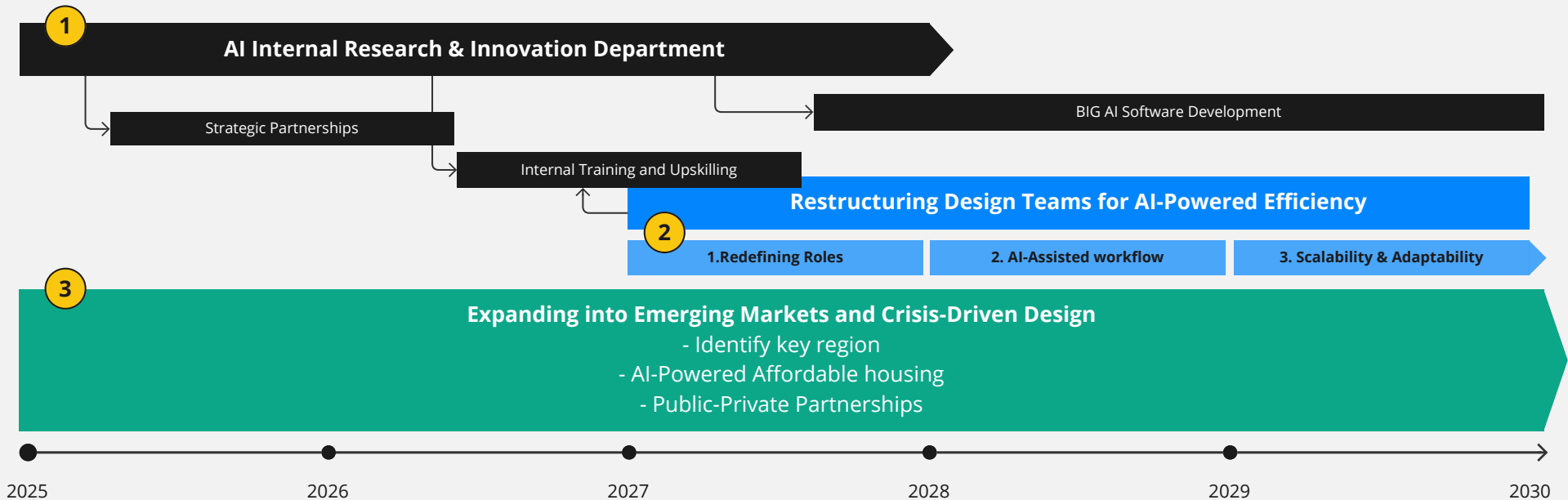


Opportunity: How might we be able to integrate Idea Iteration, Visualization and 2D/3D modeling for a more efficient design workflow?

BIG 5-YEAR STRATEGY

Maximizing Opportunities and Minimizing Threats: AI-Driven Innovation at BIG

As Chief Innovation Officer of BIG, I would implement three key strategies to position the firm at the forefront of architectural innovation while mitigating industry threats. These initiatives would focus on **integrating AI into BIG's workflow**, **restructuring design teams for maximum efficiency**, and **expanding into emerging markets**, ensuring BIG remains competitive and socially impactful by 2030.



Maximizing Opportunities and Minimizing Threats: AI-Driven Innovation at BIG

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1

AI Internal Research & Innovation Department

Internal Training and Upskilling: A structured learning program tailored to BIG's designers, offering AI-assisted ideation, generative design, and automation courses.

BIG • AI SCHOOL

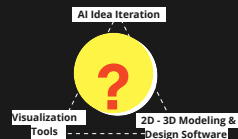
Strategic Partnerships: Collaborations with leading software companies, ventures, tech firms, and AI education platforms specializing in architectural and computational design, ensuring continuous knowledge transfer.

<ATN>
ARCHI-TECH NETWORK

AUTODESK

EVOLVE-LAB
evolve-lab.com

BIG AI Software Development: Creation of a proprietary AI-powered software, integrating: AI-driven iterative design tools for conceptual development. Enhanced visualization and virtual reality features for immersive client experiences. Precise 3D modeling capabilities for accurate and automated architectural documentation.



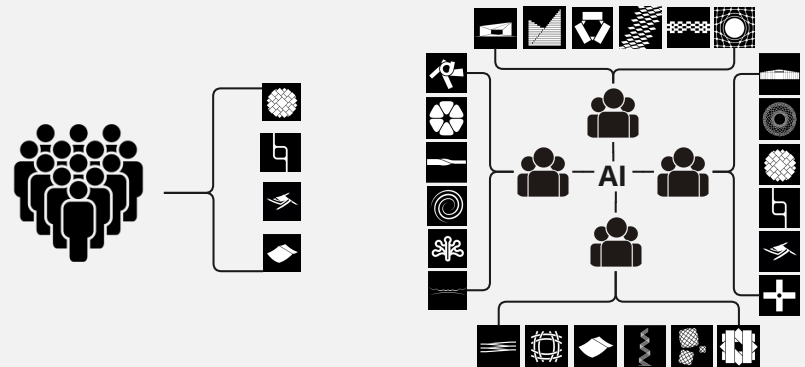
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Restructuring Design Teams for AI-Powered Efficiency

With AI-powered training and proprietary tools in place, BIG's organizational structure must evolve. I would introduce a **hybrid design approach**, where AI-augmented teams achieve more with fewer resources while maintaining creative control. Key changes include:

- Redefining Roles:** Shifting team structures to integrate AI specialists, computational designers, and data-driven decision-makers.
- AI-Assisted Workflows:** Automating repetitive design tasks, optimizing spatial configurations, and improving sustainability analysis to increase project turnaround efficiency.
- Scalability & Adaptability:** Empowering teams with AI-enhanced workflows, enabling BIG to take on more projects with the same resources, maintaining quality while improving project delivery speed.

By 2030, this transformation will enable BIG to operate with greater agility, reducing bottlenecks while fostering a culture of AI adoption within the firm.



Expanding into Emerging Markets and Crisis-Driven Design

Historically, BIG has focused on projects in developed nations, shaping urban landscapes through high-profile private and public commissions. However, a significant untapped opportunity lies in addressing **architectural challenges in developing countries** facing housing crises, climate disasters, and urbanization pressures with the aid of AI. BIG can redefine its impact by:

Using BIG's AI tools to **design modular, cost-efficient, and climate-adaptive structures**, bridging the gap between design excellence and accessibility.



CODEX
3d Printed
Housing



Identifying
Key Regions



Targeting Latin America, Southeast Asia, and Africa, where **rapid urbanization demands resilient, low-cost, and sustainable architectural solutions.**

Human
centred
design for
Affordable
Housing

Public-Private
Partnerships

GREENPEACE

unicef



CICR

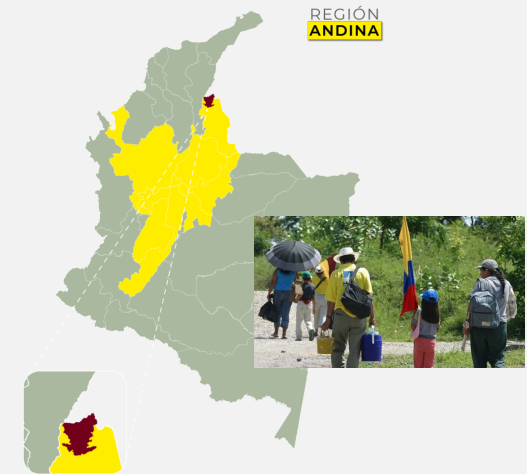


Collaborating with **governments, NGOs, and international development organizations** to secure funding and **align projects with social impact goals.**

This strategic expansion not only aligns with BIG's vision of shaping better cities but also positions the firm as a leader in socially responsible architecture, making a tangible difference in global communities.

Example of possible crisis driven design project for this proposal:

Propose a housing solution for displaced population in the north of Colombia due to violence in the region.



"The death toll rises to 56 citizens, with 54,000 displaced due to violence in northeastern Colombia."
- Swissinfo, 2025

THANK YOU