#### **ICI VIEWPOINTS**

May 19, 2016

# Walter Isaacson: Where Art Meets Science

Our world's greatest innovations, according to Walter Isaacson, can be traced to "people who truly have a sense of what it is to be human...but also feel very comfortable with science and technology, and can make the connection." And he's got the evidence to back this belief up.

Indeed, the notion that innovation thrives at the intersection of art and science runs through much of the work by the award-winning journalist and best-selling biographer—and it certainly spearheaded his entertaining conversation with Ted Truscott, CEO of Columbia Threadneedle Investments, at ICI's <u>58th General Membership Meeting</u>, which began yesterday in Washington, DC.

### Where Art and Science Meet

Responding to Truscott's opening query, Isaacson explained his theory about the connection between art and science by invoking two of the great technological innovators of our time: Bill Gates and Steve Jobs. Gates, he said, "is in some ways smarter conventionally than Steve Jobs was. He certainly has more processing power, and he's certainly a better engineer. But the difference that made Steve Jobs more creative and more innovative was his sense of beauty and sense of art."

To make his point, Isaacson added with a laugh, "Bill Gates invented the Zune; Steve Jobs invented the iPod, because he realized that beauty mattered."

Truscott followed up by pointing out the renewed focus by educators on a curriculum built on science, technology, engineering, and mathematics, or STEM, and asking whether this is approach is truly effective if it is not informed by an appreciation of the humanities.

Isaacson said that STEM is indeed not enough. He noted some people's support for adding arts to the curriculum—making it "STEAM"—but then added that it's not enough to simply promote an appreciation of the arts among students focused on STEM. "It's also up to each one of us who loves the arts and the humanities to also appreciate the beauty of science," he insisted. "We can't cede that to the engineers."

He continued with an example. "Most people I know who love the humanities would be appalled if you said, 'I don't know the difference between Macbeth and Hamlet.' But those same people might brag about not knowing the difference between an integral and a differential equation, or a gene and a chromosome....If we're going to truly operate at the

intersection of the humanities and the sciences, then both sides have to understand the other."

#### Fintech on the Rise

Truscott then turned to the world of finance, asking Isaacson about the rise of financial technology—or fintech, as it's known. Consumer banking, Isaacson replied, is the financial services sector ripest for fintech disruption, "because that's where we're really stuck in the 20th century."

But the fund industry's approach to fintech, he said, should focus on efficiency while staying away from becoming "commoditized—as opposed to offering something special." Fund investing, in his opinion, calls for "human relationships and intuitive judgment that cannot be entirely replaced by an algorithm or crowdsourcing."

Truscott followed up by asking what Isaacson saw as the next big thing in fintech. The author pointed to the emergence of distributed-ledger technologies like blockchain—a "living database of transactions" behind bitcoin and other cryptocurrencies—which he said could help fix what he called one of the few "flaws in the invention of the Internet."

"If you ask the people who invented [the Internet] about what mistake they made, they would say that they didn't build in verification and trust," he explained. That's where the "transformative" blockchain technology comes in.

"It means secure digital financial transactions," he said, "transactions that are trusted, have verified signatures and authorization, and that clear in an instant." It also means, he said with a smile, that "if you get an email from me saying that I've lost my passport, I'm in Uganda, and need you to wire me money, you actually know whether it's me or not."

## A History of Innovative Thinking

Technology and innovation, of course, are central themes in several of Isaacson's widely acclaimed books. Referencing The Innovators, Truscott remarked on how important the role of women—and collaboration—have been in the biggest breakthroughs of the digital age.

"It wasn't because everyone was so enlightened" that women ended up the pioneers of computer programming, Isaacson noted. The diversity they provided and collaborative mindset proved just as important as their brilliant minds—if not more so.

Indeed, as much as it makes for a good story, innovation isn't usually "a lightbulb moment," Isaacson continued. "That's not how the world works." Whether it's Apple, Microsoft, Intel, or any other innovative firm, he said, collaboration and teamwork are central to success. "The secret of leadership is not how to be a good leader, but how to create a team that can lead."

Isaacson also sang the praises of Jeff Bezos (a "great example of combining humanity and technology") and Elon Musk (a "true innovator"). Talking about Musk, he said, "you can invent Facebook or Google in your dorm," but inventing an electric car or a rocket ship is a lot more difficult, for two reasons: you have to work in the physical world, and you're up against established competitors in highly, often overly regulated sectors.

## Steve Jobs' Way

Truscott couldn't let Isaacson go without talking about the legend that is Steve Jobs. In hundreds of interviews with people who worked with the Apple founder, Isaacson recounted noticing a pattern of inspiration that bred loyalty. His colleagues would "walk through a wall for him. They would say 'He drove me mad, he drove me crazy—but he drove me to do things I didn't know I was able to do.' "

Jobs was also, contrary to popular belief, open to suggestions. Isaacson recalled that, when Apple was developing the iPhone, Jobs wanted keep all app development in-house. He finally relented after his staff spent months working to convince him. Of course, history shows it was the right call—iPhone app development is now a \$2 billion industry.

In Isaacson's eyes, Jobs understood that you need more than a great idea—you need to execute it. "Vision without execution is hallucination," he said, to audience laughter. "Steve knew how to execute."

#### The Value of Institutions

In a final round of quick questions, Truscott asked Isaacson about his greatest professional accomplishment—and Isaacson responded with an answer that few expected from a biographer of innovative icons: the importance of his contributions to the institutions where he's worked.

"It's important to realize the value of institutions that are larger than yourself—things that existed 100 years before you did, and will exist 100 years later," he explained. At Harvard, TIME magazine, CNN, and elsewhere, he added, his work "was never about me—it was about the institution and making sure it thrives."

Wrapping up, Isaacson applied this idea about the value of institutions to his love for his hometown of New Orleans. After Hurricane Katrina, he said, he wasn't sure whether the Big Easy would fully recover. But the people of New Orleans valued their city as an institution, and worked to bring it back from the brink. "If something's been around for 300 years, like New Orleans, the notion that you're going to let it die is not acceptable," he said. "That has inspired me more than anything in the last decade."

Copyright © by the Investment Company Institute. All rights reserved. Information may be abridged and therefore incomplete. Communications from the Institute do not constitute, and should not be considered a substitute for, legal advice.