From Spreadsheets to Business Intelligence

A VISION FOR 21ST CENTURY EDUCATION

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Confirmation Bias

When someone wants an idea to be true, they end up believing it to be true.
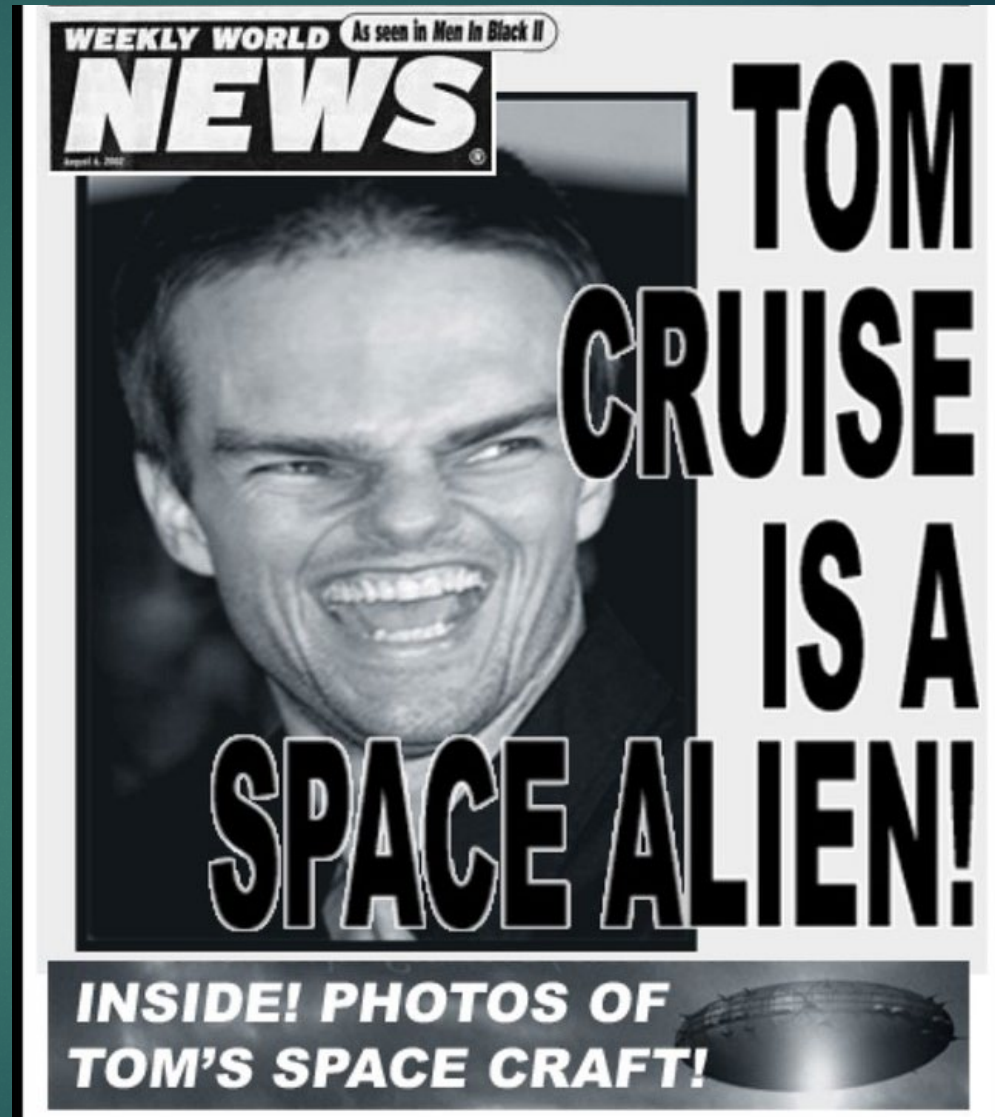
We are all subject to confirmation bias

1. Georgia, often renown for its peanut production, is the largest peanut producer in the United States.

2. Famous for the Georgia Pecan, we produce more than any other state.

3. Georgia is the Peach State because we have the largest peach production.

4. Thanks Silver Screen! Georgia now ranks at the top for movie production.

5. Georgia has a beautiful coastline, boasting more coastline than any other eastern state.
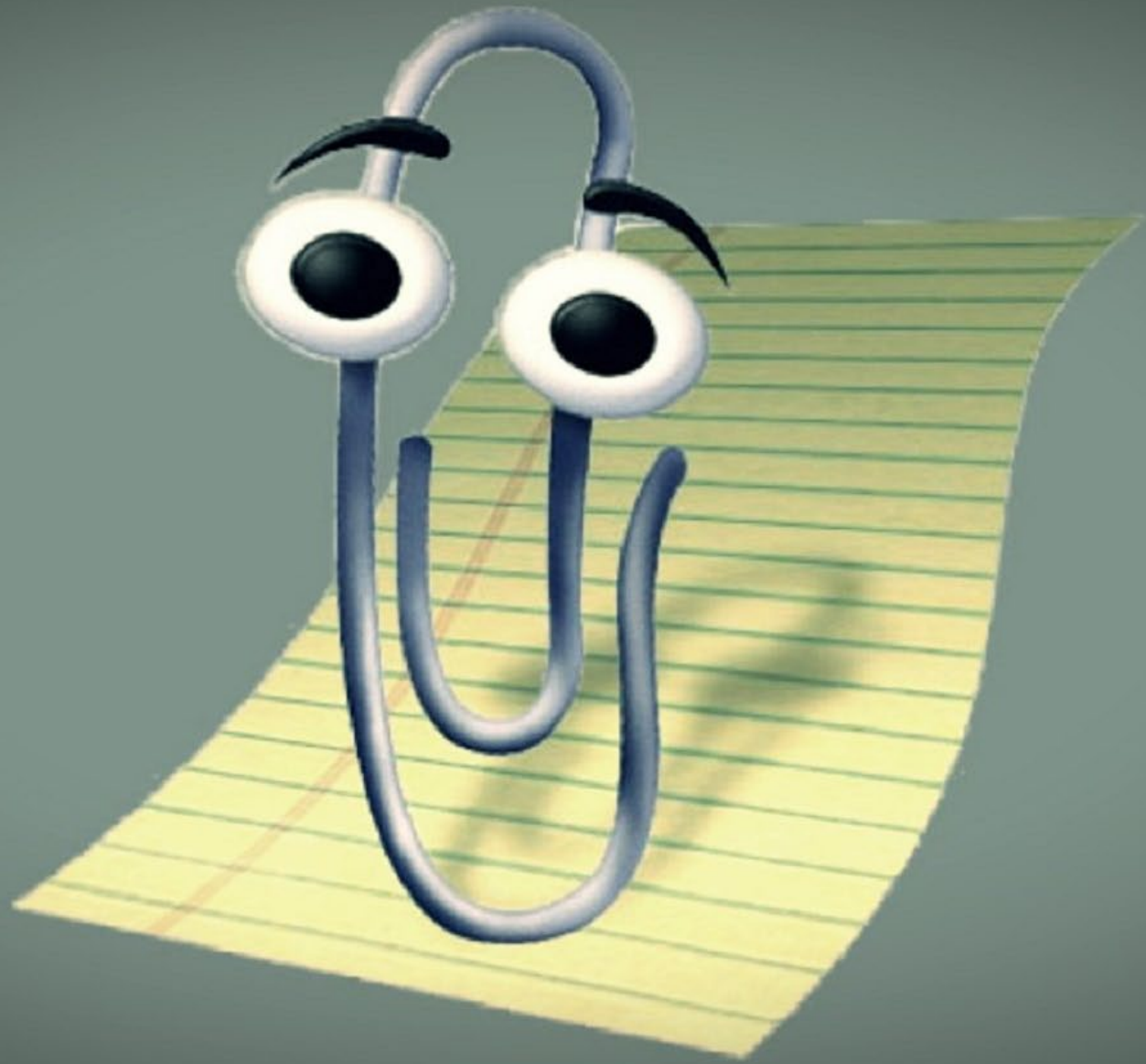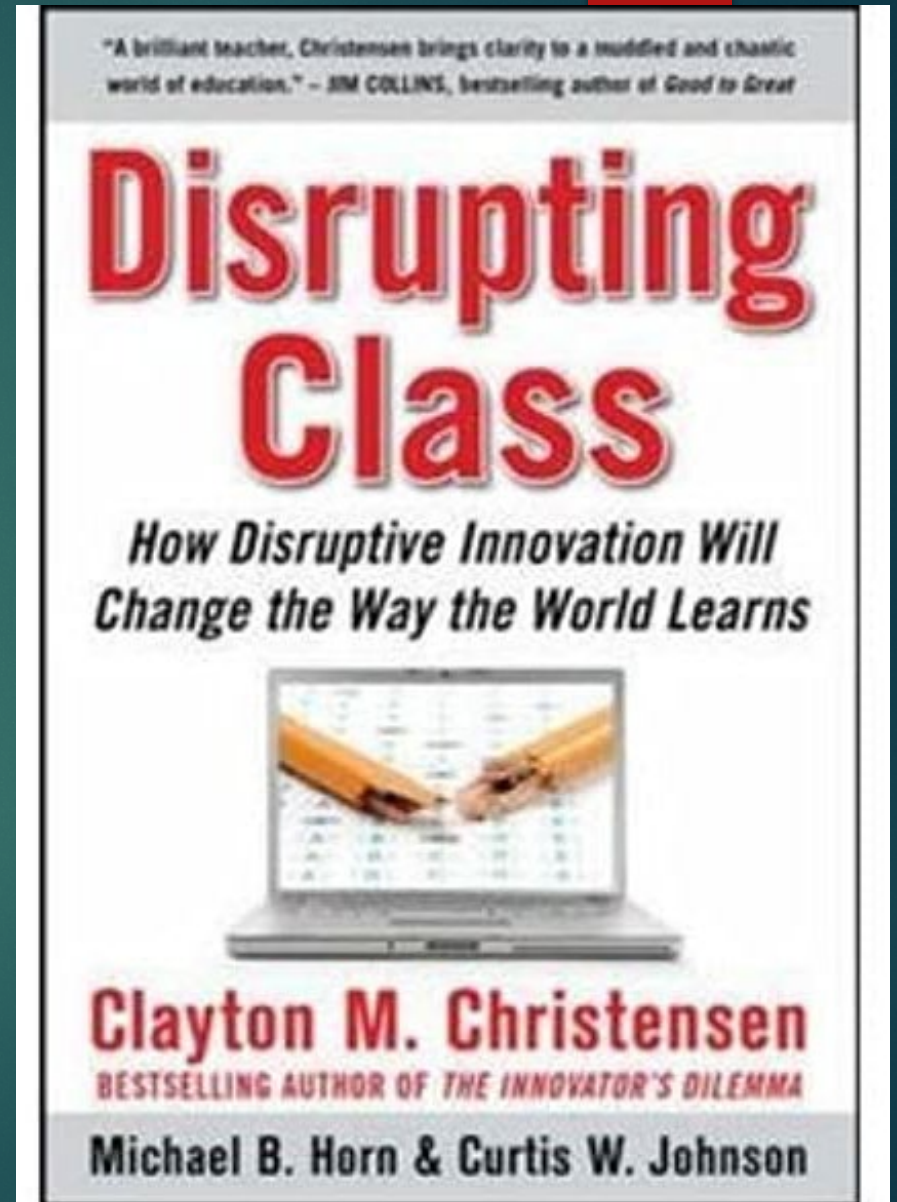
Disrupting Class

Back in 2008 innovation guru Clayton M. Christensen predicted in his much-hyped book Disrupting Class that half of all high school classes would be online by 2019, radically transforming the nature of public education.

A Future of Humans Merged with Machines

Futurist Ray Kurzweil says technology merging humans and computers is advancing on many levels to enhance both body and mind. He talks with WSJ's Andy Jordan about what he envisions for the year 2029 and beyond, why he thinks humans will one day live forever.

(Originally published June 27, 2011)

Data are powerful

Overcoming Confirmation Bias

Business Intelligence Techniques

- Gather and analyze data from a variety of sources

- Evaluate these data objectively, regardless of whether it confirms or contradicts our existing beliefs

- Use data visualization and reporting tools to present information in a way that is easy to understand and that highlights key insights and trends.

21st Century Tools

- Opportunities
- Challenges
- Transformation
- Cultural change

Opportunities

- Our agency was undergoing a transformation partly due to environmental changes while others were due to a deliberate vision from upper leadership

- Switched from on premise working to permanent telework. A dependency on technology required us to modernize our work environment

- Changed from viewing technology as an asset to technology as a service.

- Transform. Don't be a manager; instead, be a leader. Be a part of strategic planning not a contingency or option.

Challenges

- Locating all the data sets and identifying the "owner."

- Systems integration and interoperability.

- We were a paper-based organization. Often data are in an unusable form and quality is an issue.

- Resistance. People rely on their intuition to make judgement calls.

- Organizational culture: "This is the way we've always done it."

- Cost. Moved from an on-prem to cloud and from asset to a service.

- Technology is becoming "too powerful."

Transformation

▶ From instinct, "gut" decisions to data-influence decision making,

▶ From summative to formative. Increased the capacity for high-velocity, near real-time actionable data,

▶ Enabled greater agency collaboration and responsiveness to needs

▶ Improved efficiency of operations

Cultural Change

1. Promote a culture of data-driven decision making,
2. Provide training and resources,
3. Foster collaboration and diversity of thought,
4. Encourage experimentation and testing,
5. Monitor and evaluate progress.