

Designing Sustainable Banking at Stanford University

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ABSTRACT

Banks - commercial and investment - are proving dysfunctional in the 21st Century. Worse, such banks use digital technologies to promote inefficiencies, frictions and camouflage at high speed with massive scale and risk.

Notwithstanding government supports, bankers seem unwilling and unable to move to a culture of basic research on the causal connection of credit to real economy impacts, iterative design of sustainable bank models and services, rapid prototyping, testing and deployment. As "sustainable bank" innovation is the exception, regulators come to fear innovation in bank services, or to see them as at the fringe rather than core.

As a design experiment, Stanford Engineering Visiting Scholar Bruce Cahan and Associate Professor Michael Lepech proposed creating a Three-Step Exploration of Sustainable Banking in order to see the greater safety and user enjoyment of high-transparency, impacts-aware banking. Preliminary discussions with large banks (known as Systemically Important Financial Institutions SIFIs), cooperative and niche banks, financial technology (fintech) startup founders, big data analytic service providers and bank regulators suggests that a teaching hospital bank extending a University learning lab environment would be a welcome option for responsible bank innovators to gather in multi-disciplinary research.

Background

Following the 2008 Banking Crisis, Systemically Important Financial Institutions (the large commercial and investment banks) became even larger, their staffs downsized and their appetite for innovations that increase lending outright or based on objective sustainability standards declined. Simultaneously, a group of bootstrapped and venture-backed startups began to offer innovations in payments/remittances, Small to Medium Sized Enterprise (SME) lending, crowd-funding and peer-to-peer matching of individual borrowers and lenders, microfinance, currency exchange and even in currency itself. And with the massive government supports and subsidies of SIFIs (including insurers), bank regulators became more cautious about bank innovation, innovators and de novo bank startups, and innovation averse as to non-bank startups unbundling and offering financial services.

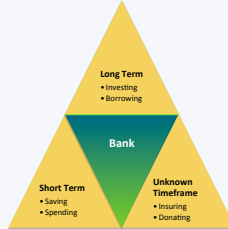
Post-2008 banking and finance

- reduced and tightened requirements for lending to SMEs and other engines for the "real economy" (as opposed to the GDP representing financial transactions and trades tethered to real economic output),
- extended the effects of the global recession, and
- put pressure on governments to issue sovereign debt to pump liquidity into their economies.

REDESIGN: BANKING AS SIMPLY 6 FUNCTIONS

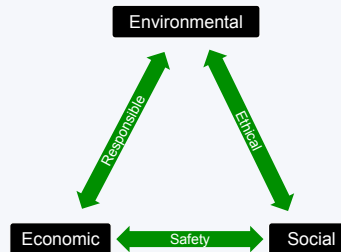
Banks perform six basic functions in three timeframes. (Insurance ripens a donation if no claim is made.)

The 6 services are the financial life activities of people and businesses. Combining the services aims saving, spending, investing, borrowing, insuring and donating at environmental and social goals.



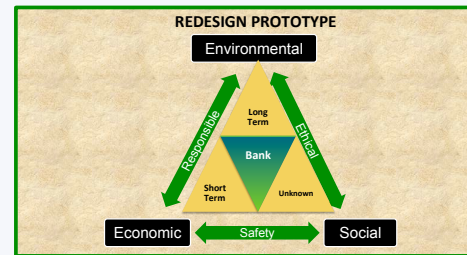
REDESIGN: SUSTAINABILITY WRAPPER FOR BANK

Sustainability principles anticipate regulatory and reputation concerns. As bank services become digital information platforms, sustainability flows can be offered as visual content for bankers and their customers to aim at impacts that meet their individual and group goals.



= SUSTAINABLE BANK SERVICES, SIMPLIFIED

Our research into bank safety and sustainability suggests that wrapping all 6 bank functions in high-transparency, impacts-reward feedback loops would let customers and bankers weather recession, brand and ESG/CSR/SRI risks better, while reducing industry systemic risk.



REDESIGN USING A TEACHING HOSPITAL BANK

Stanford University is a hub for innovations in design thinking, digital commerce, environmental, physical and social resiliency, "big data" analytics, social entrepreneurship, and the neuroscience of compassion and altruism.

Traditionally, bankers, engineers, designers, sustainability officers and risk modelers are kept at arms-length, in creating bank products and user experience. Buildings that reduce energy, environmental and social impacts, customers navigating personal and business lifecycle events to reduce bad loan loss reserves, supply chain data telling stories of corporate and SME borrowers - all await a bank credit policy that rewards responsible behaviors.

Through a proposed Sustainable Banking Institute inside of Stanford University, aligned with a first adopter bank - GoodBank™(IO) - outside, sustainable banking technologies and bankers trained to use them will grow as new options.

SUSTAINABLE BANKING DEFINED

Sustainable Banking occurs where three resiliencies exist through the bank and its services:

- Sustainability of the Bank Itself** - Is the bank safe for itself and its customers as the regulators and the history of banks failing during recession confirm?
- Sustainability of the Bank's Customers** - Will customers dealing with the bank be safe and better off for doing so? Can the customers' banking mean more and cost less? Why are banks still needed?
- Sustainability of the Bank's and its Customers' Impacts** - In a resource-constrained world, how are the impacts of the banks' transaction flows seen, priced, exchanged and rewarded? Does this transparency make the bank safer?

REFERENCES & CONTACTS

References:

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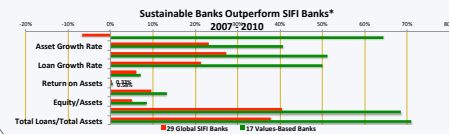
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OBSERVATIONS: BANK SAFETY

Global Alliance for Banking on Values reports suggest that banks - typically smaller and operating through a cooperative or other regional focus - have outperformed the major SIFI banks through the past 10 years, and post-2008 Financial Crisis by lending to SMEs and regional borrowers.

How and why such performance differences exist intrigued Stanford Engineering.



ALTRUISM (RATHER THAN FEAR) AS COLLATERAL

Traditionally, bank loan documentation and creditors' rights/bankruptcy laws create collateral based on fear of consequences: loss of a home mortgaged, loss of a business growth by tapping bank capital.

Banks can shift from passively awaiting its customers' lifecycle events and defaults, into becoming a KTH: **Knowledge Transfer Hub**, where customers who have overcome a job loss, divorce, business failure or other lifecycle event can be recognized and rewarded for helping others do so successfully. A KTH strategy reduces the banks' exposure to bad loans and adds altruism collateral to the bank's loan workout options and assets.

The culture change needed for SIFI banks will not come through regulatory response to past crises and misbehaviors. The culture change will come as resiliency built up as KTH bankers strengthen how customers navigate lifecycle events.

SUSTAINABLE BANKING & UNLIKELY ALLIES

This Spring 2013 Quarter, Stanford Engineering's first Sustainable Banking Seminar (CEE 244A) attracted campus-wide registrations from Engineering, Graduate Business, Design, Law and other schools at Stanford.

Guest speakers and observers included banks, regulators fintech innovators, and SME finance journalists.



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