



profile pruning

Avoiding the shadow of the cloud

What if strategically concealing elements of our online identity became a major health strategy? As data mining allows companies, governments, and fellow citizens to gather more information about any given individual's health status, risk profile, and personal life, many people will seek to withhold or conceal their personal information online. Many will do this by creating alias online accounts for specific activities and by paying for certain items in cash. Tactics will vary by the way each individual person wants to tailor their profile. However, knowing what to conceal will be increasingly difficult as data analytics allow us to infer health states from information never previously associated with health, such as driving habits. Motivations will vary as well—many will have ideological preferences for privacy or openness, while others will want to avoid negative consequences from insurance companies, potential employers, and acquaintances.

strategy

SIGNAL TCP LifeSystems > TCP is
developing software to search marketing firms'
data to identify people's health risks.



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sharing health devices

Giving up data for social connection

What if medical devices become social tools? As consumer medical technology becomes increasingly powerful, patients will share their diagnostic tools and data with others as a way to save money and connect socially. People with chronic diseases or high-risk profiles will share health devices like blood glucose testers with friends and relatives to create or strengthen social connections. Others will make games around medical devices, like athletic sensors, or even genome sequencers, to surprise people with unexpected information about their own bodies and let them compare results. People repurposing health devices to create social experiences will still be using them for health and well-being purposes, just not the ones they were originally intended for.

strategy

SIGNAL spit parties > 23andMe promotes parties where people congregate to spit in vials for genetic testing.



A little spit is all it takes.



sharing health devices

Giving up data for social connection



optimizing health choices

Using cost-benefit analysis tools for health

What if we could manage our health like we manage our finances? With access to data-based tools that forecast the health costs and benefits of any given decision, people will begin to proactively search out health “bargains”—the most health benefits for the least amount of effort, time, or money. Some will go to great lengths to ensure food choices that have the best enjoyment to health cost ratio. Others will calculate the health effects of today’s decisions, seeing healthy, but expensive, food choices as an investment that will save them health-care dollars later. And savvy personal data managers will weigh the costs and benefits of every single data transaction—giving information to marketers or public health agencies only when there is a clear benefit in return.

strategy

SIGNAL **CakeHealth** > This web service is a tool for managing all of one’s health expenses through a single platform.





optimizing health choices

Using cost-benefit analysis tools for health



digital dieting

Programming information consumption for well-being

What if we started to limit our information consumption to optimize health? In an always-on age, people will begin to program information streams for automated and ambient well-being boosts, such as adjustments to the airflow or lighting of a room. Tools featuring biometric feedback loops will show how information overload causes stress to body and mind in real time, making time affluence a new indicator of well-being. In a departure from earlier models of episodic behavior change through practices like technology sabbaths, the real shift here is toward habit design. Look for new terms such as “infovegan,” “conscious computing,” “information obesity” to become central to health.

strategy

SIGNAL The Information Diet > Clay Johnson’s book outlines the health consequences of information overload and always-on lifestyles.

The Information Diet

A Case for Conscious Consumption

Amount Per Serving

Total Words 12027 207 minutes

24% of Daily Recommended intake

% of Book

History 8%



digital dieting

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cognitive off-loading

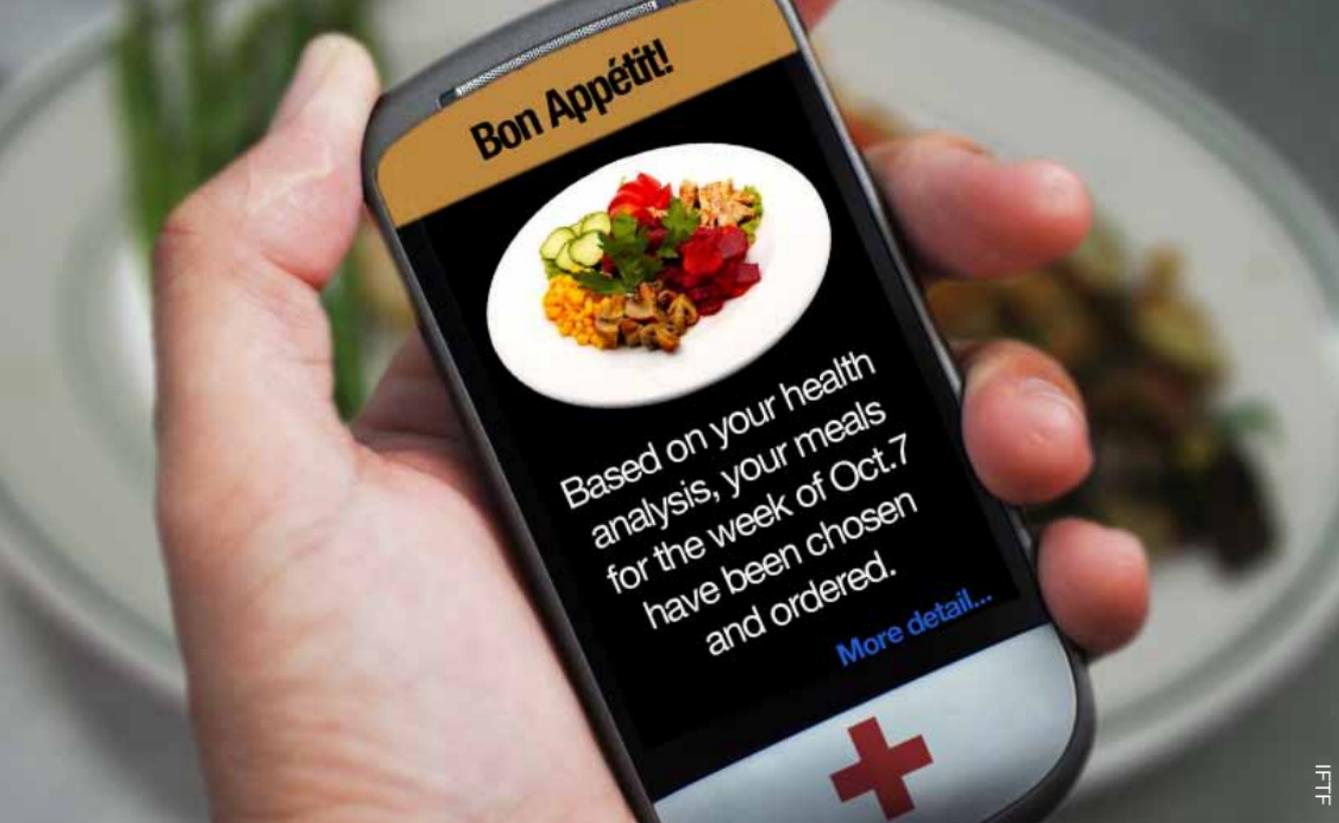
Embedding and automating well-being

What if we could outsource our health decision making? As powerful computing tools become more accessible, many will manage personal well-being by off-loading various tasks and functions to machines. For instance, some will rely on bots to make their food choices as a way of sticking to diets. Others will off-load decision making to save time and cognitive energy when there is too much information to sort through and choices are overwhelming. Some will even employ computers to take on social functions, and find companionship for themselves and for loved ones with bots.

strategy

SIGNAL Watson > IBM's Watson AI computer's earliest uses in health care include diagnosing, guiding treatment, and providing confidence-level assessments for all responses.





cognitive off-loading

Embedding and automating well-being





future proofing

Retrofitting for tomorrow's well-being

What if you could quantify your future health? People today seek to ensure a healthy tomorrow through diet, exercise, and attention to personal safety, or in extreme cases by freezing eggs or banking cord blood. As we gain new knowledge of the determinants of health and as information tools make it easier to quantify the likely future results of today's actions, people will tailor their social and biological environment to ensure future health. Some will deliberately expose themselves to physical and emotional hazards as a form of vaccination. Some parents may expose their children to environments with diverse microbial composition to future proof against developing asthma.

SIGNAL FamilyCord › At birth, FamilyCord captures cord blood and banks it so the stem cells can be used in case of future disease.





future proofing

Retrofitting for tomorrow's well-being

taking the fiction cure

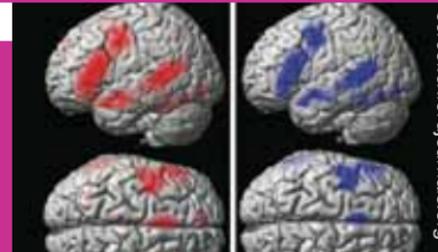
Finding health in fictional worlds

What if taking a healthy dose of fiction became an accepted well-being strategy? In a decade, taking a healthy dose of fiction will be an accepted well-being strategy. Already neuroscience suggests that reading graphic descriptions of activities can trigger the same neurological pathways in the body as performing them—and possibly the same hormonal responses as well. Reading lists for those with particular diseases, interactive fiction sites that target troubled teens, and health-oriented role-playing games offer up fiction as a healing tonic. If illness results from poor adaptation of the body to its environment, entering a fictional environment for prescribed periods of time may reorganize the body's responses for improved health.

strategy

SIGNAL grasping ideas with the motor system >

Research has shown that the motor centers of the brain light up when people read descriptions of body movement.





taking the fiction cure

Finding health in fictional worlds



dropping out of health

Choosing happiness over health care

What if the overwhelm created by a million biomedical articles per year made the disease-fearing population stop caring about diets, exercise, and daily blood pressure fluctuations? What if the costs of health care drove households to drop their health insurance and invest instead in things that made them happy? Thousands of self-health blogs and medical websites give hints that a growing subculture of health dropouts exists. From academic papers calling for a new medical paradigm to in-your-face blogs, the voice of discontent points to a future where health may no longer be a unifying metric for well-being.

strategy

SIGNAL The Emperor's Tailors > This article is one of many voices taking aim at current U.S. models of "healthy lifestyle," which places responsibility solely on the individual.





dropping out of health

Choosing happiness over health care



creating pre-sick identities

Strategically creating identity around risk and predisposition to demand personalized health

What if personal health risks come to define a new form of activism? Genetic testing has already paved the way for a new class of previvors, people who know they are predisposed to develop particular cancers and other genetically encoded illnesses. This label comes with new support groups, forms of counseling, and highly specific preventive health behaviors. As we identify an increasing number of risk factors and predispositions, genetic and otherwise, many will discover that they are pre-sick. These new pre-sick people will be inspired by previvors and demand personalized strategies and care to avoid potential illnesses. One-size-fits-all lifestyle and nutrition recommendations will give way to near-real-time advice for daily life.

strategy

SIGNAL previvor stories and strategies > This website provides a forum for women to share stories about their “previvor” choices to undergo mastectomy before cancer appears.





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Strategically creating identity around risk and predisposition
to demand personalized health