THE DARK SIDE OF COMPLEX INFORMATION TECHNOLOGY INTENSIVE FIRMS

Jonatan Jelen & Marko Kolaković

UDK/UDC: 658.52.011.56
JEL classification / JEL klasifikacija: M15
Preliminary communication / Prethodno priopćenje
Received / Primljeno: February 01, 2010 / 01. veljače 2010.
Accepted for publishing / Prihvaćeno za tisak: June 15, 2010 / 15. lipnja 2010.

Summary

While the Complex Information Technology-Intensive (CITI) firms of the ‘new economy’ have contributed to expanding the context and creation of social value in unprecedented ways they still may have a dark side: A substantial portion of this new benevolent image and laudable reputation rests on a very specific framework of self interest and self serving preservation and perpetuation with three central tenets: regulatory capture, regulatory arbitrage, and regulatory opportunism. In this paper the attempt is made to expose and reconcile this conflicted character of CITI firms, as their seeming imperative of social value creation is being achieved with controversial quasi-regulatory practices.

Key words: CITI Firms, Regulatory Opportunism, Regulatory Arbitrage.

1. INTRODUCTION

The Chinese proverb “May you live in interesting times!” sounds like a good-luck wish. Yet, it is really a curse. And interesting times we live in, n’est-ce pas? Adding insult to injury, our entire traditional socio-economic industrial and financial complex is being unhinged in unprecedented ways, at a time when we still haven’t quite understood many of the recent information technology phenomena to robustly anchor a knowledge-centric and information technology-intensive post-service age ‘experience economy’.

1 An earlier draft of this paper was presented at the ECIW 2009 conference in Lisbon, Portugal
2 Jonatan Jelen, Parsons The New School for Design, New York, USA, E-mail: jelenj@newschool.edu
3 Marko Kolaković, Ph.D., Associate Professor, Faculty of Economics and Business Zagreb. University of Zagreb, E-mail: mkolakovic@efzg.hr
In particular, the near-cataclysmic economic collapse of the 2007 - 2009 period has been preceded by the emergence of a new breed of firms already scornful of established patterns of business and – at the time of writing - proving rather resistive to the turbulent gyrations of the markets. We are alluding to the likes of Google, eBay, Facebook, Amazon – to name but the most popular - and some foreign equivalents such as the Chinese QQ and Baidu. We will label them Complex Information-Technology Intensive (CITI) firms for their unparalleled new character. Partly as a result of economic specialization, partly because of intelligent design, they configure the variables of strategy, structure, scale, scope, and social position in a truly Schumpeterian spirit of creative destruction. They are fractional, partial, and modular (Brusoni 2005). They are grounded in social networks. And they are ubiquitous and quickly becoming part of our daily routines and economic transactions, much like utilities. They are unique not only in the way they propose value, but in the way they exist as near-monopolies. They increasingly shape our social fabric, guiding our communications, directing our social interactions, and organizing our cyberspace. While their impact is truly welcomed in the immediate, it comes at future costs and with as-of-yet unanticipated consequences. It reduces our potential for independent future decision-making and increases our socio-economic path dependency in ways that we cannot yet measure. And what cannot be measured, can't be understood either. What is not understood can't be managed.

Aside sporadic and purely anecdotal evidence (such as the alleged conspiracy by Google plotting world domination), the unobservable nature of the object of investigation, the new CITI firms' positioning vis-à-vis our socio-economic regulatory institutions, requires an a priori theoretical treatment. The purpose of this critical concept paper is to expose the ontology, i.e. the world-view of these new business models with respect to our existing socio-economic institutions of government, society, and markets. The motivation is to identify and the goal is to frame the central tenets upon which rests the positioning of these firms vis-à-vis their regulation and their regulator(s).

The prominent CITI firms mentioned above – and increasingly their foreign equivalents, such as the Chinese QQ and Baidu, for example - have upped the ante in a contradictory manner: In a noble way, on the one hand, benefiting a wide variety of stakeholders via some original and novel business models, they have been creating presumably significant amounts of social value, far above and beyond the immediate private wealth they return to their stockholders. Their strategies are ostensibly cooperative and collaborative rather than combative, their structures accentuate resilience and nimbleness instead of monolithic hierarchies, their immediate focus is not on sheer scale but on intelligent scope, and their social position sets new benchmarks in terms of complex transformational effectiveness and leadership impact, i.e. deemphasizing simple transactional and productive efficiency. But there is a dark side to all this graciousness: Some substantial portion of this new benevolent image and laudable reputation rests on a very specific framework of self interest and self preservation with three central tenets: regulatory capture, regulatory arbitrage, and regulatory opportunism. Carefully connecting the three stand-alone economic principles of monopolistic competition, intellectual property rights protection, and voluntary preemptive regula-
tory forbearance, they have created power structures of unprecedented magnitude. While some great critics and commentators of the legal community have been voicing concerns loudly with respect to the legal and regulatory implications for the formation of a code of the *business mode* (i.e. the way they *behave*), we will present the elements of a framework that grounds this new controversial attitude in the *business model* (i.e. the way they *exist*). Our motivation in this critical concept paper is to expose the so-called dark side of these new business models, so intensely concerned with securing and maintaining a monopoly position, intellectual property, and proprietary standards, that they indeed rival forms of command economies and statism in terms of control and power. These new business models are creating entities that can instantaneously morph from market to firm and back, elevating themselves into a *sui generis* form above and between the two pillars of our economic institutions, thus potentially evading entirely their long established consequences. While we initially contended ourselves with benign labels such as ‘virtualized’ or ‘networked’ organizations, we increasingly have to worry about our discomfort with this concentrated elite of firms in the service of a few, reshaping our economic environment and imposing unto us their discipline and rules. Thus we raise the question as to what extent this poses new risks and threats to our socio-economic institutions in terms of their stability, authority, and legitimacy.

### 2. THE BRIGHT SIDE

For the first time, firms can do what they couldn't do before. Until this current information revolution, firms were either part of the problem, or part of the solution, or part of the landscape. It is now that they can either (a) be the entire landscape (e.g. Amazon, Google, eBay as market makers), or (b) move the landscape altogether (e.g. Apple and the ‘iCulture’ for music and entertainment consumption). Rather than limiting themselves to the old paradigm of managerial satisficing “resolving” the problems (Ackoff 1999) given the new conditions of constrained capital, resources, time, and utility resulting in an impossibility to actually “solve” the problem, CITI firms can indeed “dissolve” the problem. By freely morphing from simple firm to an entire market structure, for example as it is the case with Amazon’s affiliate program, they can absorb any original logistics problem; on the other hand, moving the very standards and foundations of an industry, such as in the case of Google’s publishing initiatives, they can redefine a problematic situation into a new paradigmatic one.

Indeed, Amazon, Google, and eBay did not content themselves to being yet another player in their respective industries; they became the entire market respectively, inviting everyone else to join and participate. Apple single-handedly changed the way music will be enjoyed in the future, i.e. on the move, during downtime, 24/7.

Thus the likes of Google, Amazon, and eBay undoubtedly make our lives richer in many respects. These firms propose tremendous social value, dwarfing at first sight the private profits they co-generate on behalf of their owners. They further implicate the various parties in the transaction to co-create goods, services, and experiences of cultural and not merely commercial quality, such as in the case of “transmutability” (Hughes, Lang 2006; Arakji, Lang 2007). They enable us to maintain rich networks...
of relationships far above and beyond what was previously possible. They allow consumers to “produce” themselves through constructs such as transmutability. They have tremendously lowered the barriers to C2C exchange transactions and the building of communities. They allow for consumption of goods, services, and experiences financed through non-traditional means by capitalizing and monetizing personal information. While it may seem almost like “free lunch”, it is so because the true cost of this new experience economy is not quantified in currency species. This suspected cost is not measured in order of magnitude or as a difference in degree. It is different in nature, presumably logically commensurate with the new nature of those firms.

3. THE DARK SIDE

However, there are three new contextual variables that have lead to a set of contradictions in the network economy similar to the anomalies brought about by market imperfections.

First, digital markets for digital goods have created a situation where competition seems no longer a viable model. In the zero-variable-cost world of digital products and markets, e-commerce II (Laudon 2002) business models cannot use the traditional model based on incremental growth. Reverse engineering and replication of digital products and processes makes up for the eroding windows of opportunity. Due to zero variable cost, prices depress quickly between competitors to unsustainable levels in the medium and long run. This requires that firms quickly dominate the market by acquiring and securing large traffic and transaction volumes. The size and convoluted structure of the Internet makes this increasingly costlier and results in extended periods of up-front fixed cost. A competitive model would make recouping this accumulated negative cash flow unpredictable. This, in turn would eliminate incentives for capital investment and innovation. Only if a firm can almost immediately build critical mass and capture substantial market share will it be in the position to predictably recoup the initial investment.

It seems that the legal system in its current articulation cannot adequately capture this atypical requirement. It continues to cater to an atomistic market with monopolistic competition characteristics. But the successful examples of the new quasi-monopolies of e-Bay, Amazon, Microsoft, and AOL, contrasted with the failures of WorldCom, Global Crossing, and Williams Companies (in the absence of monopoly power), to name but a few, seem to suggest that we should expect firms to actively pressure the system to include a model analogous to the regulation of natural monopolies, be it based on the notion of return on capital investment, price ceilings, or other. In the absence of such regulatory intervention these forms will just substitute their monopoly power to regulatory authority and thus “capture” the regulator in an extreme way.

Secondly, information is a dramatically appreciating asset. Organizations are now faced with the following quandary: originally, the value of information increased through sharing. But this was more true for *intra*-firm information. *Inter*-firm information, in contrast, has two components: One that allows for the value creating effects
of integration and networking economics through openness, the other that provides competitive advantage. This competitive advantage derives, however, less from resource specificity or internal capability, and more from proposing a particular business process on a first mover basis. It thus needs to be immediately secured and controlled. In parallel to the pharmaceutical industry, patents are used to secure intellectual property rights and allow for a limited time of monopolistic exploitation of those rights. But the property rights were originally conceived for tangible products. Their recent extension to business process and models with the State Street Bank decision in 1998 (State Street Bank & Trust Co. v. Signature Financial Group, Inc., 149 F.3d 1368, Fed. Cir. 1998), provided unprecedented momentum for monopoly structures. This in turn is gravely inconsistent with the objectives of antitrust regulation. It furthermore makes increasingly difficult to determine if, how, and to what extent originally public knowledge is being isolated, converted to a private good, and appropriated. We expect firms to want to continue with their patenting practices at high velocity to obtain the situation of effective “regulatory arbitrage”.

Lastly, the above mentioned portion of knowledge that remains shared is done so only with the intention to destroy any remnants of strategic advantage of the competition. This is achieved by imposing proprietary technology as de facto standards. The value is greatest for the first-mover firm that is able to propagate its originally private technology throughout the industry to become widely adopted as an industry standard. Even if subsequent adopters derive value from some form of facilitated access to existing networks, their innovative capacity and activity is predicated. This type of “regulatory opportunism seems in contradiction with the regulatory perspective of network and technology neutrality that evolved over the last two decades.

Coping with this new context, CITI firms assume a more ambivalent and controversial posture that merits a more careful assessment of their aforementioned, presumably benevolent and noble contributions. They may not be entirely socially beneficial, after all. They may indeed cause social costs, however difficult to identify, capture, measure, and quantify. We propose a topology of behaviors ranging from hostile, to aggressive, to virulent and analyze the responses of these firms based on their intensity.

(a) At the most intense level, there is evidence of a right out hostile attitude in the form of extreme regulatory capture: Distortions to the originally benign imperfect market construct of monopolistic competition have unduly concentrated innovative efforts in the hands of a few, overwhelming and neutralizing regulation in favor of reduced competitiveness and monopolistic dominance; the resulting cost lies in the social value that was prevented from being created.

(b) Less intense, but aggressive is the approach of regulatory arbitrage. Assault on established institutional legal standards through either aggressive expansion of the law (such as the intellectual property protection mechanisms to patent business methods, preventing many transactions in e-commerce) or sheer sidestepping of the law (such as in contractual disputes, ignoring the rule of due process).
Finally, it its least intense form, the posture of firms is that of regulatory opportunism, i.e. the deliberate and intentional and preemptive occupation via the creation of de facto regulation and near-binding proprietary standards of yet unregulated space as a result of express regulatory forbearance.

We take up the discussion of each of these categories in turn to demonstrate their sub-optimizing and unconstructive character insomuch as they represent a veritable assault on our existing regulatory institutions.

3.1 The new nature of regulatory capture

The traditional understanding of regulatory capture places the regulator under the dominant influence of the socio-economic actor it was originally intended to regulate (Stigler 1971).

The issues of information technology are so intensely complex and technically complicated that any attempt at bureaucratic regulation is overwhelmed. The legal infrastructure of the fading industrial economic model is increasingly incapable of capturing and resolving the novel issues of the digital economy, so much so that the firm actors do not contend themselves with simply influencing the regulator, but indeed substitute themselves into this position.

Even if regulation historically lagged perpetually with respect to technological progress, it still seemed adequately resilient and responsive to afford industrial transformation and transaction-oriented technologies with stability, linearity, and continuity (Drucker 1993). This presumed capability and purpose of the regulatory environment is, however, entirely in question with respect to a digital and network economy.

The original motivation for a regulatory environment evolved from a neo-Smithian perspective of imperfect markets: with the increasing integration of social, organizational, and political structures the, original assumption of markets, in principle, as natural and spontaneous social orders, trading only rivalrous and excludable goods, became untenable. The discovery of the socially undesirable behaviors of underproduction and overconsumption of public goods along with the access and equitability problems of use of impure public goods, as well as the non-regenerable depletion of commonpool resources, led to the recognition that markets are social constructions which, in order to function properly, need rules and governance in the first place. Without them, transacting in markets with information asymmetries, moral hazard and adverse selection problems, externalities, bounded rationality, opportunism, and asset specificity have become too costly (Williamson 1975, 1985, cited in van Warden 2001).

But the scope of the law was merely emulating the focus of strategy of the time. In the tradition of Adam Smith, Henry Watt, and Henry Ford, strategy was introverted, production-dominated, and concerned with transformation at operational level and integration at organizational level. Manufacturing and marketing products “cheaper, faster, better” was paramount. This transaction cost-sensitive environment relied heavily on solutions to structured problems. One important purpose and realm of the law...
was to establish such structure-providing mechanisms by reducing risks, uncertainty, turbulence, and chaos - and thus transaction costs, and by creating a regulated, reliable, and safe environment for transactions at the lowest possible cost (Coase 1937).

Some of the heritage of the ‘invisible hand’, however, was preserved: modern implementations of regulated markets are compromises between the two extremes, striking a balance between ‘freedom from’ and ‘freedom to’. The American model, specifically, realized its maximum-incentives-through-minimum-intervention objectives with a composite approach between a minimalist legal structure properly speaking, and a positivist-affirmative ethical superimposition, commonly referred to as social corporate responsibility. This resulted in a rather fragmented, sometimes uncohesive, and somewhat uncoordinated body of exception-based rules respective of most of what is economically plausible, and limited to correcting the blatantly socially undesirable activities and outcomes.

The transition to a post-industrial – or sometimes labeled ‘post-capitalist’ (Drucker 1993) economic model - and the passage from an organization-centric information-asymmetric to a network-based economy with its new symmetries and a pronounced demand-side character is rapidly liquefying previous paradigms, including the law. Based on services and knowledge-products, the extroverted experience economy of digital markets, digital and digitizeable goods, and intensely networked and connected participants, is not merely characterized by a difference in degree of intensity or pace of change. It is different in nature and by orders of magnitude. It is not merely variable, but volatile, not merely unstable, but discontinuous. It is quickly disaggregating so carefully crafted aggregated structures, quickly dismantling the realm of previous forms of intermediation, and re-intermediating, and re-aggregating ever faster and truly thriving on Schumpeterian “creative destruction”.

The regulatory and legal environments have not kept up with this revolutionary transition, however. Regulation and the law itself has become a source of uncertainty and risk, thus amplifying the already risky and uncertainty-fraught information technology innovation process. The legal and ethical guidelines have lost their directive and governance authority in an environment of global monopolies, questionable copyright motives, and proprietary standards.

The legal community has been addressing this problem virulently with a positivist perspective. On the one hand, the extent of the current legal environment’s capacity to adapt (in the areas of antitrust, copyright, and patent law), and on the other, the exposures arising from the existing and active body of law are being examined, especially in the context of e-commerce, the Internet, and the open source movement. Attempts are being opposed to enrich the inherently private and contractual nature of business law with public extensions, such as criminal law (Freedman 1999), or unconventional ones, such as custom (Polanski, Johnston 2002). These tendencies have begun spilling over into the information technology and systems discipline that has begun to investigate the problem more tentatively, tangentially, and peripherally (van Waarden 2001; Martin 2002). To date we found little research directly and systematically addressing these issues.
We argue that the issues are not completely elucidated with the current perspective of legal parochialism. The law itself is being greatly impacted by the revolutionary advances in information technology. The question arises if and to what extent the information technology community not only affects but substitutes itself for the law and the regulator.

Enter the CITI firm. To the uninitiated observer, the persistent trend of such firms to emerge as monopolies over relatively short periods of time (e.g. Google took seven years to accomplish what WalMart hadn’t been able in over forty years) may seem like just a clever use of the dimensions of monopolistic competition. Taking advantage of positive feedback effects of network economies, costless reproduction and endless distribution of digitized and digitizeable information products, and the concept of zero variable cost seem to have almost naturally resulted in the need for a single producer in its category, in the most violent sense yet of “category killer”.

Yet, the concept of monopolistic competition was not intended to provide a monopoly position. It was intended to afford uncontested profits as long as they resulted from clever marketing of one’s own brand, for example.

But manipulating monopolistic competition to yield a monopoly position, beyond immediate private advantages, has an even more profound feedback effect on the institutional make-up of our regulatory framework. The CITI firms are not only capable of emulating traditional firm structures, or morph into markets or any hybrid form in between. Their technological scale and scope now enables them to take on - at will - the nature of regulators in their own right. AOL regulates content. Google regulates applications. Amazon is a market-maker. Facebook captures and exposes our lives. MySpace controls our creative expression. eBay creates movements of goods outside of the reach of taxation authority. 80% of personal ads on Craig’s list are solicitations for illegal prostitution…

3.2 The opportunities for regulatory arbitrage

By arbitrage, we allude to the potential to exploit as yet unrealized opportunities resulting from information-technological asymmetry.

One such example is the accelerated enforcement of contractual obligations and the punitive character of contractual terminations with so called shrinkwrap or click-wrap contracts in the interest of expediency and efficiency. The age old rule of due process requiring court-based proceedings for breach of contract is rendered ineffective and firms self-manage contractual issues.

Another example is the restrictions on fair use by digital rights management practices lobbied into law through the Digital Copyright Millenium Act (signed into law by President Bill Clinton on October 28, 1998).

Finally the most telling example is ironically also the most ambivalent, and near inconclusive:
Important impact was exerted by CITI firms through a less noticed market-institutional by-product, the regulatory framework for intellectual property rights. In an initial wave, it was a defying P2P movement symbolized by Napster that tried to neutralize copyright.

In a contradictory movement the extension of patent law provided for even more controversy. While it seemed a benign idea initially, the framework’s extension to include business method patents in the 1998 State Street Bank v. Signature Financial group decision (ibid.) was nothing short of a true quantum leap in terms of legitimizing monopoly and chilling competitiveness. The lobbying for this integrative approach to patents paid off handsomely: Amazon leaped ahead with a series of controversial patents such as the One-Click-Stop-Shop, Google patented its method of assessing relevance, and eBay snapped up the re-packaging of trust with its seller rating application. In fact the U.S. PTO saw rapid rise in patent applications from 1998 to 1999 and had to change the durational terms of patents from 17 years (as of grant) to 20 years (as of filing) (see Alter 1999).

While the recent Bilski decision (in re Bilski, 545 F.3d 943, 88 U.S.P.Q.2d 1385, Fed. Cir. 2008) may have effectively put an end to the period of protective excess for intellectual property rights, it remains that the originally unthoughtful complacency and convenience of the regulator may have already caused irreversible damage. For many information technology-industrial categories monopolies are in place and are exerting control over ideas, resources, and commercialization. While large amounts of value were generated, much value creation may also have been, currently is being, and will continue to be prevented.

The described situation seems rather antithetical to the spirit of information and information technology. While intellectual property rights were intended to allow information creators to secure benefits from their innovation creation they were not intended to allow for a comprehensive position of monopoly. Granting such a position was bestowed on the legislator. Yet the framework for IP is admittedly antiquated and rather inadequately adapted from an industrial world where scarce resources necessitated allocational efficiency and economies of scale. By judicious, selective, and discretionary manipulation of a framework that has long overwhelmed its regulators, these firms are taking the law in their own hands by creating de facto situations often stronger than authoritative law or legitimate governance: In the name of freedom of the Internet these organizations are increasingly restricting the functioning of industry participants and preventing new entrants by creating monopolies and forging ever-faster consolidation. They are outmaneuvering legitimate legal governance through regulatory arbitrage waging standard wars and sidestepping due process.

These actions in fact rival the very position of the legislator in this respect. They have assumed the position of the legislator through clever combinations and synergies among several intellectual property rights patents, combining them to an effective weapon against other industry participants, securing their own position and not limited to securing the profits and benefits from their creations. Such behavior, primarily anti-competitive and only secondarily profit-motivated had already previously been
an issue in Microsoft securing its own position beyond what had been solely possible through marketing.

This last example also demonstrates the ingenuity of the CITI firm to increase effectiveness of their quasi-regulatory ambitions through a layered approach, synergistically leveraging a composite of all three regulatory approaches.

3.3 The potential for regulatory opportunism

In its least intense expression, albeit virulent, the stance vis-à-vis regulatory systems takes the form of regulatory opportunism. With regulatory opportunism we are addressing the proclivity of CITI firms that fill the regulatory vacuum resulting from intentional and explicit regulatory forbearance. Analogous to the construct of technological opportunism (Srinivasan et al. 2002), we propose that - in a more benign and docile posture - these CITI firms hone their law-sensing and law-response capabilities in the light of changes and turbulence in their legal environment. They are likely to create pressures to make the legal environment gravitate towards them. We suggest that regulatory opportunism prompts those firms to perceive the regulatory vacuum as legally turbulent and therefore as a potential source of growth for the firms responding affirmatively to absorb the inefficacies of absent regulation.

At the center of the controversy is the question for the need of specialized Cyberlaw, and its existence as a distinct body of “law pertaining to the Internet”. The mere existence of such a debate points to a turbulent legal environment result of inconsistent and inconsequential regulatory forbearance and positioning. Two views seem to be emerging on how e-commerce and traditional commerce are converging into a powerful and dominating new form of brick-and-click commerce for the future: the traditional lawyers’ perspective is a moderate and evolutionary one, in which traditional fields of law will incrementally absorb the issues posed by cyberspace. Proponents of Cyberlaw, also labeled “cyber-revolutionaries”, however, promote regulatory forbearance from the existing law in favor of an entirely and fundamentally new legal field, or even discipline, designed to specifically address the threats posed by computer code. In their eyes, computer code is more powerful than legal code and poses particularly grave threats to online civil liberties and other acquired central values of American society left without explicit legal protection by the framers of the Constitution (Lessig, 1999, 2001). What seems a rather explosive engagement of scholars has been prompted by the advent of the Internet especially with its commercial, global, and ubiquitous character. Thus circumscribed, it is now cyberspace that is impacting the law considerably and in various areas. But unexpectedly, it invited CITI firms to quickly want to back-fill the vacuum in order to stabilize the environment.

Finally, a reference to the European efforts in the area may yield additional insights. Contrary to the rather uncoordinated and fragmented efforts of cyberspace and e-commerce regulation in the U.S., The European Union has been attempting to govern with much more regulatory activism. Several recent directives try to frame aspects of the sale of consumer goods and associated guarantees, legal aspects of e-commerce activities in the common market, harmonization of certain aspects of copyright and
related issues, and establish a common ground for the recognition of electronic signatures (Rekola, Pohjanpalo 2002). One can certainly remain skeptical about the effectiveness and necessary dynamism of such efforts in the light of traditional legal inertia and the heterogeneity of views of twenty seven nations. It remains to be seen to what extent a necessary compromise will be leading to a truly comprehensive, progressive, and pragmatic regulation. However, it is a prime example of a high level of cognizance of the issues on the part of the official regulators and the desire to curtail too much corporate mercantilism to the detriment of consumer power.

4. LIMITATIONS AND FURTHER RESEARCH

The present was a theoretical paper, outlining the contours of what we labeled the “dark side” of CITI firms. The allegations of regulatory capture, regulatory arbitrage and regulatory opportunism are inherently unobservable and don’t lend themselves easily to empirical investigation. They could, however, be captured via proxy metrics, such as the number of patents, revelatory public statements cited in the press as part of the firms’ disclosure requirements or for-immediate-release announcements of material information, various capital formation and accumulation procedures, etc. Next steps would be to collect and evaluate such evidence. And in a further step yet, via abandoned projects or firm failures in the industry, by assessing for example the number of firms or innovations that never reach their tipping point, one may be able to quantify social costs and potential losses of social value.

REFERENCES:


NEGATIVNA STRANA PODUZEĆA KOJA INTENZIVNO KORISTE SLOŽENE INFORMACIJSKE TEHNOLOGIJE\textsuperscript{4}

Jonatan Jelen\textsuperscript{5} & Marko Kolaković\textsuperscript{6}

Sažetak

Iako su poduzeća nove ekonomije koja intenzivno koriste složene informacijske tehnologije (Complex Information Technology-Intensive firms, CITI firms) doprinosile razvoju konteksta i kreacije društvenih vrijednosti na dosad besprimjeran način, svejedno imaju i svoju negativnu stranu. Značajan dio njihovog dobronamjernog imidža i pohvalne reputacije leži na izrazito specifičnoj okosnici vlastitog interesa, vlastite zaštite i vlastite samoodrživosti, a to su: regulatorno zauzeće (regulatory capture), regulativna arbitraža (regulatory arbitrage) i regulatorni oportunizam (regulatory opportunism). U ovom radu naglasak će biti stavljen na razotkrivanje te ujedno i pomirenju međusobno konfliktnih obilježja CITI poduzeća, iz razloga što se njihov prvi đn van imperativ stvaranja društvene vrijednosti zasniva na kontroverznim kvazi-regulatornim aktivnostima.

Ključne riječi: CITI poduzeća, regulatorni oportunizam, regulatorna arbitraža

\textit{JEL} klasifikacija: M\textsubscript{15}

\textsuperscript{4} Raniji nacrt ovog rada bio je predstavljen na konferenciji ECIW 2009 u Lisabonu, Portugal.
\textsuperscript{5} Jonatan Jelen, Parsons The New School for Design, New York, USA, E-mail: jelenj@newschool.edu
\textsuperscript{6} Prof. dr. sc. Marko Kolaković, Ekonomski fakultet Zagreb, Sveučilište u Zagrebu, E-mail: mkolakovic@efzg.hr