



## The European Network of Law Incubators



UNIVERSITEIT VAN AMSTERDAM



**HANS-BREDOW-INSTITUT**  
for Media Research at the University of Hamburg

### Work Package One

### Technology and Legal Roadmap

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## Introduction and Executive Summary

### Introduction

The main objective of iLINC is to establish an open European Network of law incubators that supports the provision of legal services to ICT start-ups and entrepreneurs. The services are delivered by postgraduate students from leading university-based law institutions at Queen Mary University of London and the Universities of Amsterdam, Leuven and Hamburg.

The Interdisciplinary Centre for Law and ICT/Centre for Intellectual Property Rights at KULeuven is the leading institution on Work Package 1 'Mapping the ICT Legal and Regulatory Challenges'. As the ICT technology landscape is too rich and varied to tackle all associated legal challenges in equal measure, this work package aims to ascertain the prioritised legal challenge areas for the ICT community. Moreover, the iLinc project aims to establish a network of legal incubators. Therefore, we will also assess to what extent legal incubators could improve upon their service provision. To achieve this goal, the document provided has been structured in a three-tiered approach.

- **Section 1** In this section we will determine which legal issues and challenges are the most pressing for the ICT start-up communities. In order to achieve the first goal, the iLinc network developed a survey targeted at start-ups.
- **Section 2** will develop a technology and legal roadmap. The roadmap follows a three-tiered approach. First, we will further analyse the legal challenge areas which are most relevant to the ICT start-up community. Insight will also be given on the key jurisdictional differences within the EU in those areas. Second, we will explore how these key challenge areas may evolve over time, taking into account emerging trends in the ICT sector. As a third, this roadmap will assess the extent to which legal priorities will need to change to address the future technology perspective.
- **Section 3** will establish a set of recommendations to ensure that emerging legal incubators in Europe can address the current and future legal requirements of start-ups

This is a living document. It is the intention of the iLinc network to continue to update our findings depending on future developments within the ICT community.



## Executive Summary

### **Start-ups are drawn to the ICT and Media industries.**

Most start-ups currently active within Europe operate within the ICT/media industry. Even though more traditional industries are represented as well, the majority of start-ups could be considered 'digital' as they make use of digital technologies to deliver their products or services or to produce return. Business models are increasingly based on the sharing economy, the socio-economic ecosystem enabling the trade of physical or intangible assets through a variety of platforms by end-users.

### **ICT start-ups encounter a broad portfolio of legal areas.**

During their endeavors, ICT start-ups encounter multiple legal areas, of which the following are considered to be the most important: privacy & data protection, intellectual property rights, contract & consumer law and terms & conditions. Nevertheless, e-commerce and electronic communications law affect them as well. Even though start-ups are developing a better understanding of the legal environment that might affect their business, at the initial start-up phase, legal awareness is often lacking. Moreover, ICT start-ups are ill-equipped to tackle the regulatory changes.

### **Harmonization has not prevented legal disparity.**

Even though harmonization measures have been adopted at the EU level for the identified legal challenge areas, national laws diverge. Consequently, ICT start-ups who wish to be active on a pan-European face legal uncertainty. Moreover, emerging trends (future of mobility, connectivity & convergence and bricks & clicks) are likely to have a considerable impact on the legal framework.

### **Traditional concepts hinder innovation.**

At its current state, the legal rules in Europe seem incapable of dealing in a sufficient manner with the difficulties that lay ahead because the concepts on which current EU legislation is built, do not translate well to the (future) digital environment. Many concepts and definitions within the present framework rely on traditional paradigms (e.g. consumer/trader). In an ever evolving technological landscape such as the ICT sector, this may lead to a perpetual state of 'out datedness', stifling innovation.

### **Pro-activity is key in bridging the gap between law and technology.**

Building fertile soil for innovative entrepreneurs requires more than laws – it also depends on the educational context, financial incentives, cultural context, social environment, etc. – but the importance of robust and coherent legal rules are not to be underestimated. Existing rules must be modernised and a level playing field must be ensured, whereby legislative initiatives must take into account all parties involved. EU supported initiatives, such as ICT law clinics, stimulate students to think pro-actively. This enables the future generation to tackle tomorrow's societal challenges



## Section 1: Findings from the Survey

This section will explore the findings of the survey sent out by the iLinc network. The survey was targeted at all start-ups, both European and International. This survey had a two-fold goal: a) determine the legal challenges faced by ICT start-ups and b) assess the best possible functioning of legal incubators. The first area of this section will provide a general overview of the responding start-ups. Thereafter we will assess their readiness for future change, the legal challenges they encounter and the perceived importance of these areas. Based on our observations, we will also try to ascertain the added value legal incubators may have for these start-ups. The findings represented hereunder will be adapted as the survey gathers more respondents.

### Key Observations:

- The majority of European start-ups are active within the domains of ICT and Media
- A significant amount of ICT start-ups (20%) could be labeled as operating within the Sharing Economy
- All start-ups are developing a better understanding of the legal environment that might affect their business. However, at the initial start-up phase, legal awareness is often lacking.
- Although the majority of start-ups consider they have a good understanding of the regulatory framework and are prepared to tackle future changes, small start-ups are less likely to anticipate regulatory changes.
- Given that the majority of start-ups are active within the area of ICT/Media and considering that they have a limited awareness of legal issues, it would appear that the provision of legal support in the legal areas related to the ICT and Media industry, addresses a clear market need.
- The majority of ICT start-ups have encountered multiple legal areas during their endeavors. At least half of participating ICT start-ups have come in contact with the majority if not all relevant legal domains
- Of those legal domains, the following are considered to be of most importance to ICT start-ups: Privacy & Data Protection, Intellectual Property Rights, Contract & Consumer Law and Terms & Conditions.
- Even though start-ups realize the importance of these areas, they are ill-equipped to deal with the regulatory changes. For those legal areas, half of the start-ups could not judge their readiness or felt not prepared if change would occur. Only the small minority considered themselves very prepared.
- ICT start-ups need legal advice, yet they don't have the means to seek legal counseling. The cost of legal advice is a determining factor for start-ups.
- Continuity is key: start-ups, especially at an early stage, prefer on-going advice on a face-to-face basis.
- All start-ups (even those who had already obtained professional legal advice or had already engaged with legal clinics) would very likely recommend them to others.
- Legal clinics lack exposure. Many start-ups would use them, but little know of their existence.







## 1.1. General Overview of the Survey

### Observations

- The majority of European start-ups are active within the domains of ICT and Media
- A significant amount of ICT start-ups (20%) could be labeled as operating within the Sharing Economy

The iLinc survey has gathered responses from 57 European start-ups, active within a variety of industries and countries<sup>1</sup>. The majority of European start-ups operate within the ICT and or media industry (75%). Nevertheless, all participating start-ups were active within the digital environment, or made use of information and communication technologies. The services provided by these start-ups were quite diverse, and included: e-learning, e-payments, event planning, crowdfunding and 3D imaging. Due to the wide variety of services offered by the participating start-ups, a further division into sub-sections was deemed inappropriate.

It is important to note that a significant amount of the involved start-ups (21%) could be categorised under the sharing economy. The sharing or collaborative economy refers to a socio-economic ecosystem in which certain assets are shared among peers (eg. knowledge, educational tools, funds)<sup>2</sup>. An example of the latter is PiggyBee, a Belgian start-up that offers eco-friendly shipping by travelers<sup>3</sup>. Those start-ups who provided 'other' as an answer did not necessarily fall outside the scope of the other categories, rather they provided services which could be considered to overlap with the provided areas, such as e-learning services or the development of video games.

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<sup>2</sup> See infra Connectivity and Convergence

<sup>3</sup> <http://www.piggybee.com/>

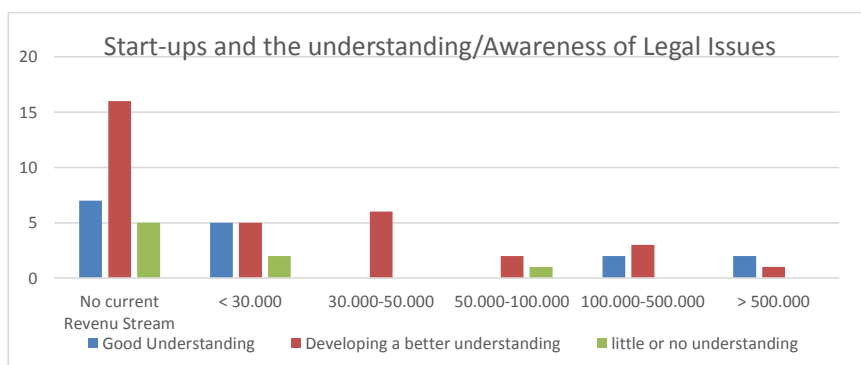


## 1.2. Legal Awareness of Start-Ups.

### Observations

- All start-ups are developing a better understanding of the legal environment that might affect their business. However, at the initial start-up phase, legal awareness is often lacking.
- Although the majority of start-ups consider they have a good understanding of the regulatory framework and are prepared to tackle future changes, small start-ups are less likely to anticipate regulatory changes.
- Given that the majority of start-ups are active within the area of ICT/Media and considering that they have a limited awareness of legal issues, it would appear that the provision of legal support in the legal areas related to the ICT and Media industry, addresses a clear market need.

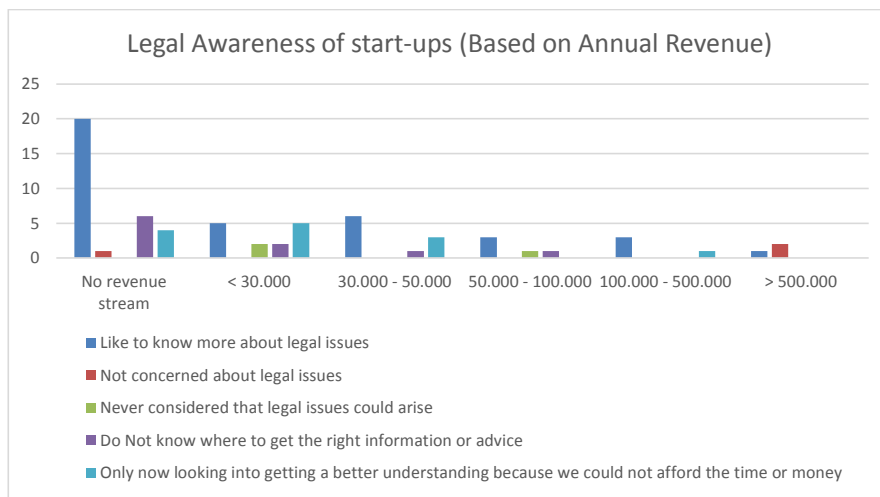
In principle, one would assume that the larger an undertaking is, the more aware it is concerning the legal issues it might encounter. All start-ups, irrespective of their current revenue stream and size, are developing a better understanding of the legal issues that affect their undertaking (Figure 1). However, particularly for those start-ups having a revenue stream under 30.000 euros, there seems to be more need for better legal advice. Small ICT start-ups have the least understanding of legal issues. As start-ups grow, legal awareness does indeed seem to increase. Nevertheless, almost all start-ups have shown to have some basic knowledge of their legal needs.



Section 1. Figure 1

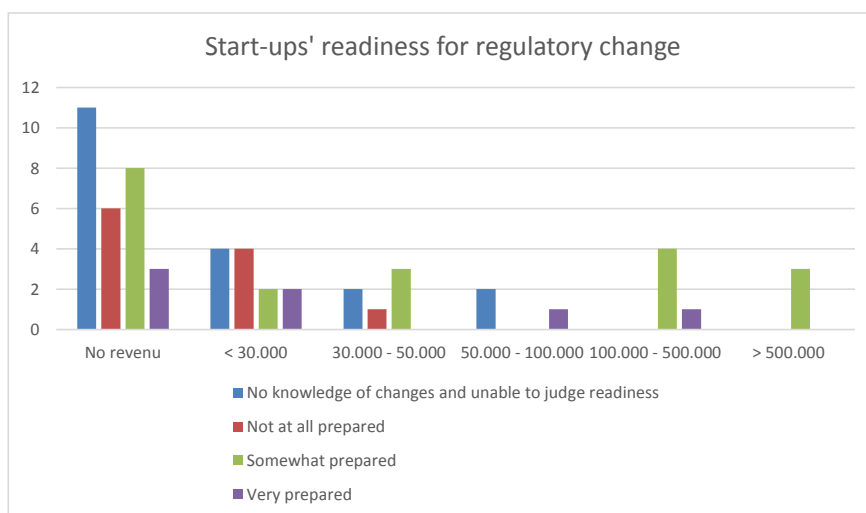
What is apparent from Figure 2, is that almost all start-ups (93%) would still like to know more about the legal issues affecting their business. However, 24% does not know where to get the right information and 31% have just now begun to look on how to get a better understanding of possible legal obstacles. A small percentage (7%) did not take into consideration that their start-up may be affected by legal issues.





Section 1. Figure 2

Given that most start-ups do have a basic awareness of legal issues affecting their business, or claim to have a good understanding of these issues, we ascertained whether this knowledge of legal issues would also allow them to adapt to future legislative changes. This is important as many regulatory domains affecting digital start-ups are about to undergo significant change, e.g. European consumer protection directive, planned Data Protection regulation, the copyright reform, a revision of the e-commerce VAT-regime...



Section 1. Figure 3

Even though most start-ups are somewhat or very well prepared to tackle regulatory change, smaller sized start-ups seem to be the least aware of future legal changes (Figure 3). Consequently, start-ups



within the first stages of development are the most in need of legal advice, as they are most likely to have either no knowledge of these changes or consider themselves not prepared. Still, awareness of legal changes among start-ups did not necessarily entail that they had sought professional legal advice. Even though none of the respondent start-ups considered legal advice as not important (100% of the start-ups had the intention of seeking advice), the actual number of start-ups who did already obtain advice was rather low.

Of those start-ups who could not judge their readiness when confronted with legal change, only 50% had already obtained legal advice. 44% deemed legal counseling as important but had not yet engaged legal firms. 1% still considered legal advice as less important.

50% of the start-ups which felt not at all prepared had sought legal advice. Within that category though, all start-ups realized the importance of legal advice. The great majority of start-ups who felt they were somewhat prepared (90%) had received legal counseling. Quite interesting is that of the start-ups who considered themselves very prepared for future change, only 50% had actually received legal advice.

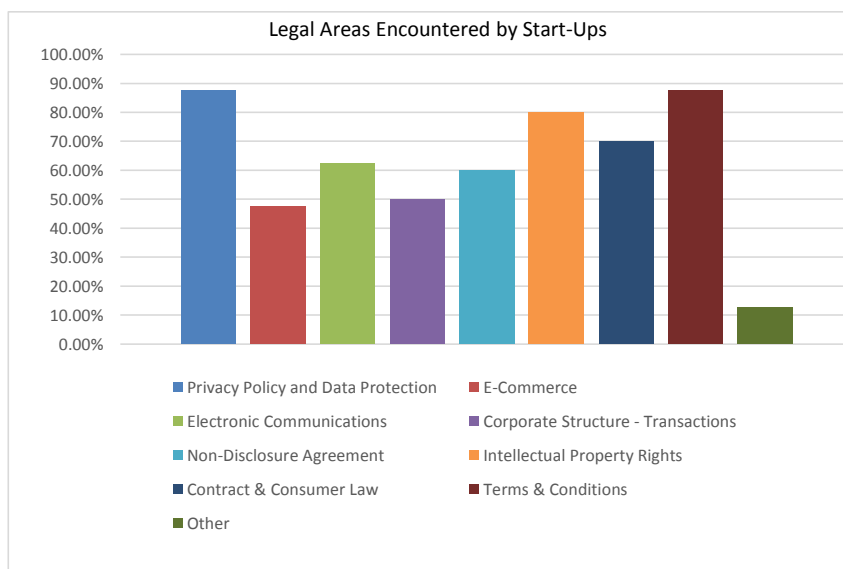


### 1.3. Legal Challenge Areas for ICT Start-ups

#### Observations

- The majority of ICT start-ups have encountered multiple legal areas during their endeavors. At least half of participating ICT start-ups have come in contact with the majority if not all relevant legal domains
- Of those legal domains, the following are considered to be of most importance to ICT start-ups: Privacy & Data Protection, Intellectual Property Rights, Contract & Consumer Law and Terms & Conditions.
- There is a correlation between the legal areas encountered by start-ups and those that are deemed most important: the areas that have been encountered the most (Privacy and Data Protection, Intellectual Property, Contract & Consumer Law and Terms & Conditions) are of high priority to ICT start-ups.
- Even though start-ups realize the importance of these areas, they are ill-equipped to deal with the regulatory changes. For those legal areas, half of the start-ups could not judge their readiness or felt not prepared if change would occur. Only the small minority considered themselves very prepared.

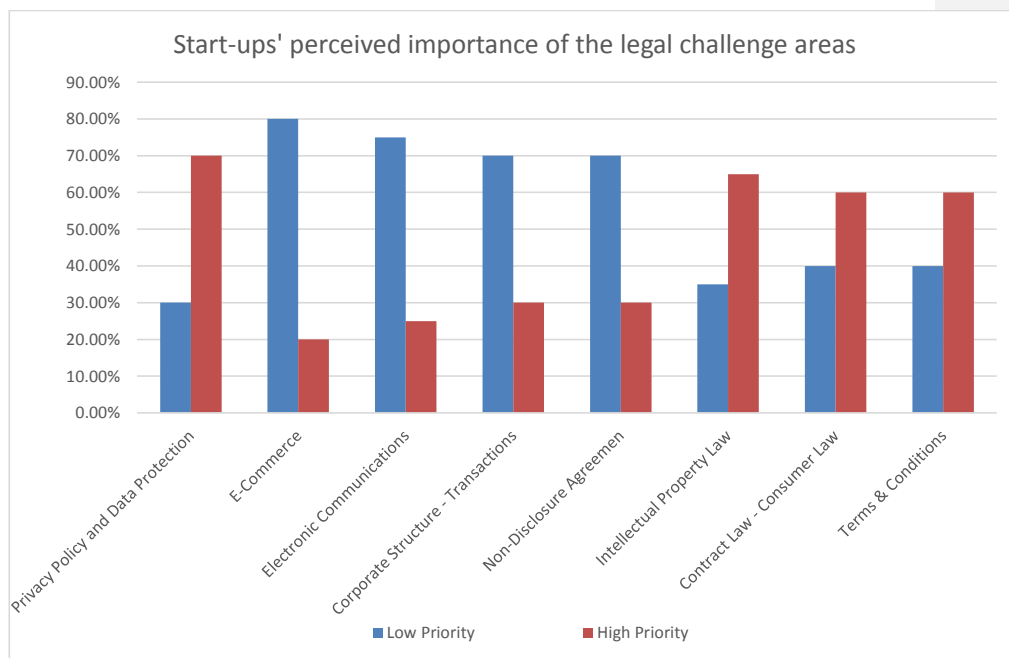
One of the most important elements of the survey was to establish those legal areas in which ICT start-ups face the most difficulties, or for which domains they require the most assistance. In order to determine the most pressing areas, it is first and foremost necessary to ascertain those legal areas that ICT start-ups had encountered during the different stages of development (Figure 4).



Section 1. Figure 4



ICT start-ups have to take into account multiple legal areas (some of which even indicated to have encountered all 8 domains) when conducting business. All of the legal areas above are well presented. 88% of ICT start-ups have encountered Privacy & Data Protection as well as Terms and Conditions, followed by IPR, which was encountered by 80% of ICT start-ups. Nevertheless, all legal areas represented within the graph were of relevance to at least half of the responding ICT start-ups. Of course some overlap exists. For instance, given the prevalence of IP within the start-up world, there is a practical need for non-disclosure agreements as well. The writing of Terms & Conditions on the other hand, is predetermined by among others contract, consumer and data protection law. In general, all legal domains are of relevance to ICT start-ups. What is more important however, is how ICT start-ups conceive the importance of these legal domains.



Section 1. Figure 5

However, even though most start-ups encounter a diverse set of legal areas, not all of these areas are perceived as important (we assumed that the importance of the need for legal advice in a certain area, is also an indicator of the impact that area has on the start-up; Figure 5). The need for legal advice was considered very important in the fields of intellectual property (44%), terms & conditions (27%), contract & consumer law (19%) and privacy policy and data protection (16%). In global, those four areas are considered by start-ups as the legal areas for which legal assistance is of high priority. The other legal areas are perceived as less relevant.



Data is often considered the raw material for the development of new innovative areas. Many ICT start-ups are therefore dependent on data gathered from their end-users. Consequently, many start-ups feel the need to receive advice related data protection legislation as they want data collection to happen in a legally compliant manner.

The dominance of IP is unsurprising as well. Every ICT start-up perceives an IP portfolio as a tool to stay ahead of competitors. Intellectual Property plays an important role in the monetization of innovation (particularly copy- and patent rights) and in market branding (trademarks). Moreover, if innovation is left unprotected, competitors may copy your ideas.

Although ICT start-ups encounter electronic communication law, the main reason why there is ultimately less need to obtain legal advice in this area may be the following: electronic communication regulation is primarily aimed at creating a level playing field, whereby legal obligations mainly target the natural monopolists of the last century. There is thus less need for ICT start-ups to take into account this legal domain as the obligations imposed do not take aim at them. Rather, the regulation aims to protect these start-ups. This legislation is nonetheless important for ICT start-ups as it informs start-ups of their rights, e.g. concerning net-neutrality.

Every undertaking whether active online or offline and irrespective of whether they provide services to businesses or consumers has encountered, and thus requires, a solid understanding of contract and contract law. Our figures indicate that terms & conditions are considered equally, if not more important. Of course, 'Terms & Conditions' is not a legal domain, rather it is a condensed rendering of obligations imposed by other regulatory domains, data protection, IP and contract and consumer law in particular. It may also be important to ascertain whether the legal requirements differ depending on the size of the start-up. In general, the need for advice within the different legal areas remains rather stable over all start-ups, irrespective of company size. Nevertheless, it seems that corporate law becomes more important as soon as start-ups start gaining more annual revenue.

#### **1.4. ICT Start-ups: Readiness for Future Change in Challenge Areas**

The ICT start-ups that took part in our survey thus consider the following four legal areas to be most pressing: privacy and data protection, intellectual property, contract and consumer law and terms & conditions. Unsurprisingly, most ICT start-ups who did seek legal counseling, obtained legal advice in those four areas. Moreover, as legal aid was mostly given on an ad-hoc basis, ICT start-ups acquired specialized advice.

However, within those areas, the regulatory framework is likely to undergo major changes in the near future. The given advice may thus no longer be relevant in the years to come. Our figures seem to indicate that, even though ICT start-ups have identified these legal areas as being the most important, they do not necessarily have the necessary knowledge to address potential changes. For all four legal areas, similar results were found as far as the start-ups' readiness for change was concerned. Around 80% of ICT start-ups considered the need for legal advice in these areas either very important or acute. Even though they had correctly identified these specific areas as challenging and important for their



businesses, 50% of ICT start-ups would be not at all prepared if legal change would occur or would not be able to judge their readiness. 30 to 40% of ICT start-ups considered themselves somewhat prepared and the minority (10-20%) felt they were very prepared for change.

From the foregoing, we can conclude that start-ups do not have a clear understanding of the full legal picture (even if they have already received legal advice). For ICT start-ups, who often are at an early stage of development, this lack of understanding could have dramatic repercussions. In the legal areas they consider to be the most important, regulatory change *is* planned. Because ICT start-ups are unable to take into account possible changes to their legal requirements, the probability of them being non-compliant with the regulatory framework as soon as their product or service hits the market is rather high.



## 1.5. Start-up Based Analysis – Relevant for Legal Incubators

### Observations

- ICT start-ups need legal advice, yet they don't have the means to seek legal counseling. The cost of legal advice is a determining factor for start-ups.
- Continuity is key: start-ups, especially at an early stage, prefer on-going advice on a face-to-face basis.
- All start-ups (even those who had already obtained professional legal advice or had already engaged with legal clinics) would very likely recommend them to others.
- Legal clinics lack exposure. Many start-ups would use them, but little know of their existence.

#### 1.5.1. Start-ups in the ICT sector.

ICT based start-ups generally remain moderate in size, with 85% having an annual revenue stream lower than 50.000 euros. When asked about their legal challenges, 90% of ICT start-ups wished to know more about potential legal obstacles and 95% considered legal advice very important. Nevertheless, the willingness and awareness of ICT start-ups of potential legal boundaries did not necessarily entail that they had actually sought legal counseling.

The amount of ICT start-ups that had actually received legal advice remained rather low (66%). In the majority of cases, advice was given on an ad-hoc basis. Figures indicate that small start-ups tend to receive ad hoc advice. Presumably this is due to budgetary reasons, whereby obtaining legal advice on an on-going basis is considered far too expensive. Budgetary considerations are also the main reason why many start-ups did not yet seek advice. Whether this is purely perception or actually grounded in truth is undetermined by this survey, nevertheless the concept of 'cost' is *the* determinant factor when it comes to legal aid.

The start-ups receiving legal advice, most often received specialized advice (76%). This may be due to the fact that advice was mostly given on an ad-hoc basis, and therefore most likely catered to a specific question of the start-up involved. However, ad-hoc advice may not be as cost-efficient: our figures indicate that continuity is an important indicator of quality. Ad-hoc advice is in 58% of the case perceived as inadequate. In the case where legal advice was received on an on-going basis, only 38 % of start-ups considered legal advice insufficient.

Even though start-ups do not want to spend too much money on legal advice, the majority of start-ups paid the standard rate, with only 32% receiving a special fee for start-ups. Given that many start-ups did not obtain legal advice due to the monetary aspect, it appears that many start-ups will not seek legal



advice within the first stages of their development, or, if they do get advice, will only be able to pay on an ad-hoc basis, which often negatively affects the quality of advice given.

Still, almost all start-ups perceive legal compliance as a crucial element to their success. Start-ups which lack legal guidance fear that: a) their business may suffer financially and is more likely to fail (58%) and b) they would be less attractive to potential funders (41%). Moreover, receiving legal advice would allow them to once again focus on other business priorities (47%).

**Conclusion:** ICT start-ups need legal advice, but lack the means to receive adequate legal advice. There thus seems to be a financial gap that needs to be addressed in order for start-ups to truly be market-ready. This gap could be filled in by law clinics. When asked whether start-ups would be interested in receiving free advice from students, 97% answered positively. Moreover, start-ups would do so for a myriad of reasons. The monetary aspect remains a main driver, as most ICT start-ups do perceive law clinics as a method to save on costs (79%). However, they would also feel that it may provide them with a) a general guidelines on the legal challenges (68%), b) an opportunity to receive cross-border legal advice through an international network of universities (59%), c) to gain specialized guidance by people who understand their legal issues (56%) and d) an indication whether further legal advice would be necessary (50%). In a lesser degree, they consider law clinics as a chance to attract potential funders (35%) and a safeguard for failure (41%). Even though law clinics have limitations, i.e. Students do not have the experience lawyers have, they could offer the necessarily guidance ICT start-ups currently lack.

#### **1.5.2. Start-ups with little or no legal understanding**

Although only 14% of all respondents felt they had little or no understanding of the legal issues they could possibly face, 70% of these start-ups were located in the ICT sector. The lack of understanding seems to be related to the size of the start-up: 87% of start-ups who indicated that they had little or no understanding of the legal environment, had an annual revenue stream lower than 30.000 euros. Unsurprisingly, these start-ups do want to know more about the legal issues surrounding them (87.50%), yet they either never considered the fact that legal issues could arise (38%) or did not know where to find the right information (38%). Consequently, this group is not at all prepared for regulatory change.

This category therefore seems an ideal target group for law clinics: they reside in the ICT environment, lack legal knowledge and have low revenue and therefore less likely to pay for 'professional' legal services. All start-ups within this category would be interested in receiving advice from a law clinic, yet given their limited budget, only 37.5% would be willing to pay for these services as long as costs remained under 1000 euros. Given their lack of knowledge 87.50% would prefer guidance to be given on a one-to-one basis.



### **1.5.3. Start-ups which have used the services of law clinics**

It is important to ascertain the experience of those start-ups who have already received advice from student based law clinics. This can help us determine flaws within the current systems and where there is still room for improvement.

An interesting observation is that 75% of start-ups which engaged into student based advice have also obtained professional legal advice. What is most interesting however, is that 70% of the start-ups that received clinic based advice, felt they had received adequate advice, a percentage that is higher than most other categories we compared.

Because these start-ups have already had some experience with law clinics, the questions which related to client satisfactory should provide valuable insight. In almost all legal areas (except for corporate and business transactions), the majority of these start-ups were very or extremely likely to recommend law incubators. In general, all start-ups would ultimately recommend law clinics.



## Section 2: Identification of the Legal Challenges Areas and the Impact of Future Technology Trends.

Section 2 will develop a technology and legal roadmap. This roadmap follows a three-tiered approach. First, we will further analyse the legal challenge areas which are most relevant to the ICT start-up community. Insight will also be given on the key jurisdictional differences within the EU in those areas. Second, we will explore how these key challenge areas may evolve over time, taking into account emerging trends in the ICT sector. As a third, a conclusion will be drawn based upon the findings of the first two steps.

### Key Observations:

- Even though harmonization measures have been adopted at the EU level for the identified legal challenge areas (Privacy & Data Protection, E-Commerce, Electronic Communications, Corporate Structure, Intellectual Property and Contract & Consumer Law), national laws diverge. Consequently, ICT start-ups who wish to be active on a pan-European face legal uncertainty.
- Within the legal challenge areas encountered by ICT start-ups, Member States' divergent approach concerning the following topics is considered particularly problematic:
  - Privacy and Data Protection: the concept of 'consent'
  - E-Commerce: crypto currencies and the concept of 'content aggregator'
  - Electronic Communications Law: Net Neutrality legislation
  - Corporate Structure – Transactions: crowdfunding
  - Intellectual Property Law: territorial definition and exercise of copyright
- The following emerging trends are likely to have a considerable impact on the identified legal challenge areas:
  - Future of Mobility: Data Protection Law, but also Liability
  - Connectivity and Convergence: Data Protection Law, Consumer Law, E-Commerce, Corporate Financing
  - Bricks and Clicks: E-Commerce
- At its current state, the legal rules in Europe seem incapable of dealing in a sufficient manner with the difficulties that lay ahead because the concepts on which current EU legislation is build, do not translate well to the (future) digital environment.
  - Many concepts and definitions within the present framework rely on traditional paradigms.
- In an ever evolving technological landscape such as the ICT sector, this may lead to a perpetual state of 'out datedness'. In turn, ICT start-ups face uncertainty, which stifles innovation.
- Building fertile soil for innovative entrepreneurs requires more than laws – it also depends on the educational context, financial incentives, cultural context, social environment, etc. – but the importance of robust and coherent legal rules are not to be underestimated.
- Existing rules must be modernised and a level playing field must be ensured, whereby legislative initiatives must take into account all parties involved.
- EU supported initiatives, such as ICT law clinics, stimulate students to think pro-actively. This enables the future generation to tackle tomorrow's societal challenges



Comparative Table: Findings of Section 2 (To be further complemented as research continues)			
Legal Challenge Area	Pressing Need Area	Examples of Jurisdictional Differences in Pressing Need Areas	Impact of Future Trends on Legal Challenge Areas
Privacy and Data Protection Law	The Concept of 'Consent'	<p><u>Portugal, Spain and Sweden</u>: unambiguous consent</p> <p><u>Italy &amp; Germany</u>: consent must be in writing</p> <p><u>France, Ireland and UK</u>: no specific definition of consent</p> <p>+ further deviations</p>	<p><b>Future of Mobility:</b></p> <p>Difficulty in determining data subject and data ownership.</p> <p>Multitude of actors within production chain require additional transparency measures.</p> <p>Increased need Privacy by Design and Default, Minimization.</p> <p><b>Connectivity &amp; Convergence:</b></p> <p>Increased transparency measures needed.</p> <p>Increased importance of right to access and correction</p> <p>Behavioral advertising might impose more dangers</p> <p>'Consent' may become meaningless</p>
	Crypto Currencies	<p><u>Belgium, Cyprus, Denmark, France, Portugal, Netherlands, Spain</u>: no regulation, but warnings concerning dangers have been issued</p> <p><u>Germany</u>: bitcoins are considered units of value (private means). License could be necessary to maintain or create bitcoin market</p>	<p><b>Connectivity &amp; Convergence:</b></p> <p>Virtual &amp; crypto currencies might increase in popularity, necessitating regulation</p> <p><b>Bricks &amp; Clicks:</b></p> <p>Increased number of online transactions are bound to have an impact on e-commerce legislation</p>
Commerce Law	Content Aggregators	<p><u>UK</u>: issue has been subject of government consultation, but no regulation yet</p> <p><u>The Netherlands, Portugal</u>: considered a host</p> <p><u>France</u>: host, but could be considered 'editor' under press law, depending on content provided</p>	



Electronic Communications Law	Net Neutrality	<p><u>The Netherlands, Slovenia</u>: have net neutrality laws in place. Dutch law prohibits providers from blocking or filtering connections to customers</p> <p><u>Estonia, Finland, France, Greece, Spain</u>: have made access to the Internet a human rights</p>	
Corporate Structure-Funding	Crowdfunding	<p><u>UK</u>: implemented regulation in 2014. 10% rule for inexperienced investors</p> <p><u>Germany</u>: heavily regulated, prospectus requirement for funding over 100.000 euro</p> <p><u>France</u>: limited exception regime</p> <p><u>Greece</u>: unregulated</p>	<p><b>Connectivity &amp; Convergence:</b></p> <p>Peer-to-peer crowdfunding and lending models are very much in the spirit of the connectivity trend. Yet, uncertainty as to the applicable regime (e.g. regulation of credit institutions)</p>
Intellectual Property Rights	Copyright	<p>Both the territorial definition and exercise of copyright is considered problematic.</p> <p><u>Definition</u>: every Member State has different copyright legislation</p> <p><u>Exercise</u>: differs among industries, e.g. collective licensing (music industry) vs. individual licensing (audiovisual industry)</p>	
Contract & Consumer Law			<p><b>Connectivity &amp; Convergence:</b></p> <p>The traditional paradigm consumer/trader may become less relevant due to the popularity of peer-to-peer models.</p>



## **Section 2. Step 1. Analysis of the Key Challenge Areas and Jurisdictional Differences**

The ICT landscape is broad. As a result many start-ups are faced with a plethora of legal challenges. However, the challenges described hereunder are but an indication of those experienced specifically by ICT Start-ups and should by no means be considered the only challenges that may arise. Nevertheless, we believe that these areas cover a wide range of technological industries, and are therefore of considerable importance for entrepreneurs wishing to be active in the ICT environment.

The subsequent sections will analyze the following 8 legal challenge areas for start-ups: privacy policy & data protection, e-commerce, corporate structure & transactions, non-disclosure agreements, intellectual property law, contract & consumer law and terms & conditions. We will also assess the main jurisdictional differences within the European Union for those areas. In most of these areas, the European legislator already adopted harmonization measures, i.e. directives, and many of these instruments are currently subject to reform. In some of the key areas listed (Data Protection and Electronic Communications), the European legislator has planned the introduction of a regulation, which should, in principle, lead towards less fragmentation. Considering that the basic rule set of Member States will thus share similarities, we will, in this part of the roadmap, focus on specific legal topics that are particularly problematic for start-ups but for which there is not yet any consensus among Member States concerning the regulatory framework.

As the input from ICT start-ups related to the legal challenge areas was rather low, the specific topics chosen were determined by a variety of sources, such as national start-up manifestos, experience of the legal incubators, as well as emerging trends. However, some legal areas will only be briefly described as they do not necessarily relate to ICT start-ups specifically, but to all start-ups in general.

### **Key Observations:**

- Even though harmonization measures have been adopted at the EU level for the identified legal challenge areas (Privacy & Data Protection, E-Commerce, Electronic Communications, Corporate Structure, Intellectual Property and Contract & Consumer Law), national laws diverge. Consequently, ICT start-ups who wish to be active on a pan-European face legal uncertainty.
- Within the legal challenge areas encountered by ICT start-ups, Member States' divergent approach concerning the following topics is considered particularly problematic:
  - Privacy and Data Protection: the concept of 'consent'
  - E-Commerce: crypto currencies and the concept of 'content aggregator'
  - Electronic Communications Law: Net Neutrality legislation
  - Corporate Structure – Transactions: crowdfunding
  - Intellectual Property Law: territorial definition and exercise of copyright



### 2.1.1. Privacy Policy & Data Protection

Privacy Policy and Data Protection Regulation refers to the handling of personal data by undertakings. Digital start-ups must be aware of the regulations that relate to the handling, collection, use and storage of personal data provided to them by their users, employees, web visitors, etc. Although the current European legislative framework is sound as far as the objectives and principles are concerned, it has not prevented fragmentation in the way personal data protection legislation has been implemented across the Union. In the near future however, the European legislator will likely adopt a Data Protection Regulation, which will have direct effect in all 28 Member States. Nevertheless, at the current stage, national laws diverge and ICT start-ups are unable to fully assess the impact data protection regimes may have on their business model.

#### ***Pressing Need: Clarification on the Processing of Personal Data on the Basis of Consent***

Start-ups will find new ways of utilizing data when developing future services and products. Therefore it is necessary for ICT start-ups to have a clear understanding of the circumstances under which they are allowed to process personal data. Although art. 7 Directive 95/46/EC provides the criteria under which data processing can take place, the article's implementation in Member States' laws is divergent as the criteria leave ample room for interpretation<sup>4</sup>.

Most ICT start-ups who partook in the survey, were community driven. The development of a strong user network does not merely rely upon the provision of novel end-user experiences, but equally relies upon trust. ICT start-ups who depend upon the collection of personal data to improve their platforms most often consider consent as the most appropriate ground for data processing. Indeed, data subject consent seems to provide the most user-friendly and transparent basis for data processing activities, especially within community driven projects.

#### ***Jurisdictional Differences***

Although Directive 95/46/EC foresees that consent must be "free, specific and informed", Member States do not deal uniformly with the matter<sup>5</sup>. Some EU MS laws emphasize the need for consent to be 'manifestly' free, specific and informed, by including "unambiguous" in the very definition of consent (Portugal, Spain and Sweden)<sup>6</sup>. Italian and German laws require consent to be in writing, however deviation is allowed in the online environment: consent can be given by a mouse-click<sup>7</sup>. France, Ireland and the UK do not define "consent". However, in France, consent for the processing of data is valid if it amounts to a "freely given, specific and informed indication of the wishes" of the data subject. In the UK, implied consent seems possible for non-sensitive data. Irish law requires consent to be given explicitly, yet implied consent suffices in circumstances where the purpose for data processing can be clearly understood and is well-defined. As a result of this divergence, consent validly obtained under the law of

<sup>4</sup> Douwe Korff, DG Justice, Freedom and Security, *Comparative Study on Different Approaches to New Privacy Challenges in particular in the light of Technological Developments* (Comparative Chart, 20 January 2010)

<sup>5</sup> Douwe Korff, DG Justice, Freedom and Security, *Comparative Study on Different Approaches to New Privacy Challenges in particular in the light of Technological Developments* (20 January 2010)

<sup>6</sup> Ibid., p. 70

<sup>7</sup> Ibid, p. 71



one country, may very well be considered insufficient for subsequent data processing activities in another country, even if that country belongs to the EU/EEA<sup>8</sup>.

In the proposed Data Regulation, the criterion 'explicit' will be added to the definition of consent in order to avoid confusing parallelism with 'unambiguous' consent. Moreover, implied consent is no longer accepted as a legitimate ground for processing purposes:

*"Consent should be given explicitly by any appropriate method enabling a freely given specific and informed indication of the data subject's wishes, either by a statement or by a clear affirmative action by the data subject, ensuring that individuals are aware that they give their consent to the processing of personal data, including by ticking a box when visiting an Internet website or by any other statement or conduct which clearly indicates in this context the data subject's acceptance of the proposed processing of their personal data. Silence or inactivity should therefore not constitute consent. Consent should cover all processing activities carried out for the same purpose or purposes. If the data subject's consent is to be given following an electronic request, the request must be clear, concise and not unnecessarily disruptive to the use of the service for which it is provided<sup>9</sup>."*

**Other legal areas that could be further explored:**

- 1) Data Portability
- 2) Sensitive data: what constitutes sensitive data and under which circumstances can it be processed.
- 3) Data transfer to third countries
- 4) Privacy related aspects of the Cloud.

### 2.1.2. E-Commerce

Commerce in an online setting differs greatly from the traditional brick and mortar environment: e-commerce is characterised by 1) virtuality, 2) unboundedness and 3) multiplicity<sup>10</sup>.

**Virtuality:** Most digital start-ups will engage with others in a virtual environment, abstracted of face-to-face contact<sup>11</sup>, whereby the user will obtain information concerning the seller, the products and services offered through an electronic device.

**Unboundedness:** As transactions can now be performed as soon as an internet connection is available, commercial activities are no longer bound by time and space.

**Multiplicity:** The number of actors involved in e-commerce goes beyond the traditional buyer/seller paradigm. The online trading process no longer consists solely of the buyer and the seller, but requires interaction with several intermediaries.

<sup>8</sup> Ibid.

<sup>9</sup> Commission, 'Proposal for a Regulation of the European Parliament and of the Council on the protection of individuals with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation)' COM (2011) final

<sup>10</sup> Binding J. and Purnhagen K., 'Regulations on E-Commerce Consumer Protection Rules in China and Europe Compared – Same Same but Different?' (2011) 3 JIPITEC, p. 187

<sup>11</sup> Ibid, p. 187; Dahiyat EAR, 'Towards New Recognition of Liability in the Digital World: Should We Be More Creative?' (2011) IJITL.



These three elements have opened up the economic potential of both ICT Start-ups and the consumer, yet they also bring along additional challenges. Because the Internet has no constraints, start-ups are expected to have a certain level of service at all time. They must be aware that the online availability of their services will most likely depend upon the services provided by other actors, e.g. cloud storage. For those start-ups who offer their users a platform to share content, liability may arise for harmful third party content or defamatory statements. E-commerce is also interconnected with consumer protection law: there are guidelines for distance selling, such as providing a right to withdrawal.

### ***Pressing Need: Crypto Currencies***

By simplifying transactions and by preventing the user to enter personal payment details, end users can be motivated to use virtual money. Hence, the introduction of a virtual currency for virtual goods could generate additional revenue for young start-ups. The possibility to earn extra virtual currency could also lock in users. Moreover, virtual currencies could be an important tool within the app market and advertising industry when designing strategies to reap benefits of the virtual goods market<sup>12</sup>.

The implementation of virtual money, and crypto currencies in particular, as a payment mechanism may thus provide European digital start-ups an advantageous position. Even though the United States leads the Bitcoin market, the EU possesses 25% of the Bitcoin network<sup>13</sup>.

However, there is quite a lot of confusion as to what the exact regulatory framework of crypto currencies is. The 'UK Start-up Manifesto' for instance called out the UK government to look into the regulation of crypto currencies<sup>14</sup>. The European Central Bank has tried to raise awareness concerning the potential dangers, yet at this point in time, there is no clear sign yet of regulatory intervention on an EU-wide level.

### ***Jurisdictional Differences***

Countries such as Belgium, France, Cyprus, Denmark, Netherlands, Portugal, Spain and the UK have no current regulation on crypto currencies, yet warnings have been made concerning the potential dangers involved with them<sup>15</sup>.

In Germany, bitcoins are considered units of value having the function of private means of payment within private trading exchanges or they are substitute currencies that are used as a means of payment in multilateral trading transactions on the basis of legal agreements of private law<sup>16</sup>. In its current state, German authorities do not require bank supervisory licensing for the giving, acceptance or mining of bitcoins. Nevertheless, licensing could become necessary under various circumstances, including the creation or maintenance of a market in bitcoins<sup>17</sup>. In China, bitcoin should not be circulated nor used as a currency in the market.

<sup>12</sup> European Central Bank, *Virtual Currency Schemes* (October 2012), p. 18.

<<http://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf>>

<sup>13</sup> <http://tech.eu/features/1034/bitcoin-startups-europe/>

<sup>14</sup> Guy Levin, *The Startup Manifesto* (September 2014) < <http://www.coadec.com/wp-content/uploads/2014/09/Startup-Manifesto.pdf>>

<sup>15</sup> The Law Library of Congress, *Regulation of Bitcoin in Selected Jurisdictions* (January 2014) < <http://www.loc.gov/law/help/bitcoin-survey/regulation-of-bitcoin.pdf>>

<sup>16</sup> Ibid.

<sup>17</sup> Ibid.



***Pressing Need: Harmonization concerning Internet Intermediary Liability***

The introduction of the Internet in the 90's was the catalyst that stimulated the development of the knowledge economy, whereby the sharing of assets, whether tangible or intangible, has unleashed a maelstrom of connectivity. Within the digital environment, a lot of emphasis has been placed on this 'shared economy'. Undoubtedly, many start-ups will find new ways to interact with their communities. Creating a community and a platform through which users can engage with one another also opens up the possibility of legal infringements, e.g. liability for harmful/unlawful third party content and defamatory statements.

***Pressing Need: Clarification of the notion 'Content Aggregator'***

Many of the ICT start-ups who partook in our survey provided some kind of content aggregation for their users (e.g. event sharing, sports tracking, news boards). Nevertheless, the current European regulatory landscape does not provide a legally recognised definition of 'content aggregator'<sup>18</sup>. The answer thereof is nonetheless important as it enables to determine which liability regime should be applied when harmful or illegal content would be shared.

***Jurisdictional Differences***

In the UK, content aggregators have been subject of government consultation; however no specific regulation has materialised. The UK DTI rejected the need to extend the hosting defences to search engines, content aggregators and providers of hyperlinks for the time being<sup>19</sup>. In the Netherlands, one ruling qualified content aggregators as a host, and thus subject to their liability regime<sup>20</sup>. Portugal e-commerce law provides a specific liability exemption for intermediary service providers associated with content. In other words, Portuguese law qualifies content aggregators as hosts. In France, the Paris High Court declared the video-sharing platform Dailymotion to be a host provider rather than an editor. The Court considered that the platform was aware of the contents on their platform, even though there was no monitoring obligation, the exemption regime for hosts fell as soon as the Host provider created the circumstances favourable for illicit activities<sup>21</sup>. French case-law further illustrates the legal disparity concerning content aggregators. The French High Court qualified Myspace as both a host provider and an editor under press law. Therefore the Court declared that the liability provisions of press law had to prevail over the liability exemptions applicable to hosts<sup>22</sup>.

***Other legal challenges that could be further explored:***

- i) Online Dispute Resolution as a means to tackle e-commerce disputes.
- ii) Notice and Take-Down procedures

<sup>18</sup> Thibault Verbiest, *Study on the Liability of Internet Intermediaries* (Markt/2006/09/E, 12 November 2007), p. 102

<sup>19</sup> <http://www.olswang.com/articles/2007/02/uk-rejects-extension-of-e-commerce-directive-defences/>

<sup>20</sup> Thibault Verbiest, *Study on the Liability of Internet Intermediaries* (Markt/2006/09/E, 12 November 2007), p. 102

<sup>21</sup> *Ibid.*, p. 103

<sup>22</sup> *Ibid.*, p. 104.



### 2.1.3. Electronic Communications

Portable devices, and smart phones and tablets in particular, have become an integral part of our conversation means. The compliance of your company with telecom regulations; for example does your company comply with telecom regulations including obligations relating to access and interconnection, and security of networks and services.

#### ***Pressing Need: Net Neutrality and Net Neutrality Awareness***

Net neutrality is the principle that Internet Service Providers and governments should treat all data on the Internet equally, not discriminating or charging differentially by user, content, site, platform, application, type of attached equipment, and modes of communication<sup>23</sup>. For ICT start-ups developing disruptive technology, this principle is of utmost importance. If incumbent network operators were to implement content and application-specific traffic management regimes by for instance throttling streaming or blocking certain technologies, the utility value of their applications would drop<sup>24</sup>.

#### ***Jurisdictional Differences***

Currently only the Netherlands and Slovenia have net neutrality laws in place. The Dutch legislation prohibits providers from throttling or filtering the connections of their customers, but they are also prevented from using deep packet inspection. Network operators and service providers can only inspect communications per user request or if network management purposes or legal orders prescribe such inspection. Finland, Estonia, France, Greece and Spain do not have specific net neutrality laws, but they have made access to the Internet a human right. These countries actively promote universal access and support a neutral web environment<sup>25</sup>. In Norway, voluntary guidelines for internet neutrality were issued. These guidelines enjoy wide support among stakeholders.

In 2010, the United States FCC issued the transparency rule: broadband internet access service providers have to disclose their network management practices, performance characteristics, and terms and conditions of their broadband services. Consumers can thus make more informed decisions on which broadband provider to subscribe to and service providers are given the necessary information to help them develop their business plans and assess their risks<sup>26</sup>. On January 2014 the US CoA for the District of Columbia Circuit affirmed the FCC's authority to regulate broadband Internet access and upheld their judgement that net-neutrality encourages broadband investment. The Court upheld the transparency rule, but vacated the no-block and no-unreasonable-discrimination rules<sup>27</sup>. However, it appears that US ISP's such as Comcast and Verizon have begun charging certain content providers, such as Netflix, more to handle their data<sup>28</sup>.

<sup>23</sup> <http://www2.deloitte.com/content/dam/Deloitte/be/Documents/risk/be-aers-ers-net-neutrality.pdf>

<sup>24</sup> Frode Sorensen, 'The Norwegian Model for Net Neutrality'

<[http://www.npt.no/aktuelt/nyheter/\\_attachment/6472?\\_ts=13d3aeda9cc](http://www.npt.no/aktuelt/nyheter/_attachment/6472?_ts=13d3aeda9cc)>

<sup>25</sup> Giusy Cannella, Reagan Macdonald & Jochai Ben-Avie, 'Net Neutrality – Ending Network Discrimination in Europe' (Access)

<[https://s3.amazonaws.com/access.3cdn.net/653b3b0adb37e88f4b\\_u7m6vw480.pdf](https://s3.amazonaws.com/access.3cdn.net/653b3b0adb37e88f4b_u7m6vw480.pdf)>

<sup>26</sup> [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-10-201A1\\_Rcd.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-10-201A1_Rcd.pdf) <http://www.fcc.gov/openinternet>

<sup>27</sup> <http://www.fcc.gov/openinternet>

<sup>28</sup> James Vincent, 'Net Neutrality in the UK and Europe: What does the new legislation mean for you?' *The Independent* (4 April 2011) <<http://www.independent.co.uk/life-style/gadgets-and-tech/net-neutrality-in-the-uk-and-europe-what-does-the-new-legislation-mean-for-you-9238768.html>>



The European Commission's Connected Continent proposal does however aim to implement a new net neutrality regime (which was particularly important for SMEs and start-ups)<sup>29</sup>. If the proposal is accepted, all network operators will have to respect net neutrality (even though reasonable traffic management measures may still be implemented in certain circumstances):

*"Within the limits of any contractually agreed data volumes or speeds for internet access services, providers of internet access services shall not restrict the freedoms provided for in paragraph 1 by blocking, slowing down, degrading or discriminating against specific content, applications or services, or specific classes thereof, except in cases where it is necessary to apply reasonable traffic management measures<sup>30</sup>."*

#### **Other legal challenges that could be further explored**

1) The regulation of electronic communications markets in the presence of OTT services and platform competition.

#### **2.1.4. Corporate Structure – Transactions**

Young innovative start-ups do not necessarily understand the importance of their corporate structure or how transactions are dealt with from a legal point of view. Nevertheless, the incorporation of the business form of the company, sale and exit strategies, liability among partners, etc. can be of considerable importance, even at an early stage. Start-ups may gain traction quickly, which could result in beneficial partnerships or potential takeovers. For instance, after their virtual reality headset was funded through Kickstarter in 2012, virtual start-up Oculus VR was acquired by Facebook for 2 billion dollars in 2014<sup>31</sup>. Multi-million dollar acquisitions also occur within Europe: Swedish game designer Markus Persson sold his game Minecraft to Microsoft for 2.5 Billion dollars early October<sup>32</sup>.

#### **Pressing Need: Crowdfunding**

At an early stage, ICT start-ups primarily require funding and capital to make their desktop ideas reality. Crowdfunding has become an increasingly popular method of capital acquisition: whereas start-ups may fail to receive funding from traditional sources, such as banks, private equity houses and angel investors, the crowd can invest directly into projects or undertakings they truly believe in<sup>33</sup>.

Regulatory fragmentation nevertheless remains a key hurdle for crowdfunding projects within Europe. National laws allow for local crowdfunding industries to grow, yet fragmentation reduces the potential market size and leaves little room for scale<sup>34</sup>. Because the European financial directives are interpreted

<sup>29</sup> Impact Assessment Connected Continent Proposal, p. 63

<sup>30</sup> Commission, Proposal for a Regulation of the European Parliament and of the Council laying down measures concerning the European single market for electronic communications and to achieve a Connected Continent, and amending Directive 2002/20/EC, 2002/21/EC and 2002/22/EC and Regulations (EC) No 1211/2009 and (EU) No 531/2012 COM (2013) 627 final.

<sup>31</sup> Stuart Dredge, 'Facebook closes its \$2bn Oculus Rift acquisition. What next?' *The Guardian* (22 July 2014) <<http://www.theguardian.com/technology/2014/jul/22/facebook-oculus-rift-acquisition-virtual-reality>>

<sup>32</sup> Keith Stuart, 'Minecraft sold: Microsoft buys Mojang for \$2.5bn' *The Guardian* (15 September 2014)

<http://www.theguardian.com/technology/shortcuts/2014/sep/16/markus-persson-minecraft-struggling-microsoft>

<sup>33</sup> Tax & Legal Group of the European Crowdfunding Network, *Review of Crowdfunding Regulation, Interpretations of existing regulation concerning crowdfunding in Europe, North America and Israel*

<sup>34</sup> Tax & Legal Group of the European Crowdfunding Network, *Review of Crowdfunding Regulation, Interpretations of existing regulation concerning crowdfunding in Europe, North America and Israel*, p. 7.



differently across member states, the emergence of a healthy European crowd fund industry is currently unlikely<sup>35</sup>. A pan-European position is missing as there is too little cross-border engagement between the national financial services regulators. Additionally, EU MS legislation often differentiates among crowdfunding models (equity, lending and donations or rewards). Consequently, legal uncertainty may prevent start-ups from obtaining the necessary funds.

#### Jurisdictional Differences

In April 2014, the UK implemented a crowdfunding regulation. Inexperienced investors in equity schemes will have to certify that they will not invest more than 10% of their portfolio in unlisted businesses. However, UK entrepreneurs have raised their concerns, stating that the 10% rule takes 'the crowd out of crowdfunding'<sup>36</sup>. In Germany, crowdfunding is already heavily regulated, whereby the prospectus requirements in respect of each funding over 100.000 euros is very strict, especially in comparison with other EU jurisdictions<sup>37</sup>. The German regime applicable to crowdfunding therefore makes an attractive cost-reward ratio impossible<sup>38</sup>. France has recently implemented a crowdfunding regulation, which provides an exception to securities public offering rules and the banking monopoly. The new rules have implemented a different status regime depending on the type of crowdfunding platform (i.e. equity and debt securities (CIP) and loan and donation models (IFP)). Some countries have kept crowdfunding largely unregulated, such as Greece, where crowdfunding is still in an infancy stage<sup>39</sup>.

### 2.1.5. Intellectual Property Rights

What do I need to think of when creating a logo and choosing a trade name? How do I protect my brand and website? How can I protect my ideas and product? What must I do to prevent being liable for infringement of third party intellectual property rights (copyright, trademarks, patents, design rights)? These are the typical questions that arise in the context of IP protection.

#### ***Pressing Need: Copyright Reform***

Content driven media start-ups have rightfully identified the current copyright framework as a legal barrier to the provision of their services. There is currently no pan-European copyright title, i.e. works are protected on the basis of the 28 Member States. The use of a work in all 28 MS thus requires content providers to clear the rights for all those territories. As a result, transaction costs for content providers who wish to operate on a multi-territorial basis are astronomical. Moreover, without proper rights clearance, consumers who have subscribed to a content service in one territory, may not necessarily be able to access that content if they travel across borders. The Commission is currently investigating possible copyright reform options that may mitigate the territorial nature of copyright.

<sup>35</sup> Ibid.

<sup>36</sup> <http://www.bbc.com/news/business-26464551>

<sup>37</sup> Ibid., p. 90

<sup>38</sup> Regulation of Crowdfunding in Germany, the UK, Spain and Italy and the Impact of the European Single Market, p. 16

<sup>39</sup> Tax & Legal Group of the European Crowdfunding Network, *Review of Crowdfunding Regulation, Interpretations of existing regulation concerning crowdfunding in Europe, North America and Israel* (October 2013), p. 82.



The exercise of copyright by the creative contributors causes limitations as well and may be considered equally problematic. Right holders often opt to provide exclusive licenses to service providers or they limit the territorial scope of their licenses. As long as no unitary title is put in place, the exercise of copyright will cause territorial fragmentation. The exercise of copyright is linked to industry practices and standards, rather than jurisdictional differences (e.g. music industry relies on collective licensing whereas the movie industry depends upon individual licensing practices of the producer). For ICT start-ups, and content providers in particular, to truly thrive within the Digital Single Market, both the definition and the exercise of copyright will have to be addressed.

***Other legal areas that could be further explored:***

- 1) Copyright aspects of text and data mining in the EU.

### **2.1.6. Contract & Consumer Law**

What type of contracts do you need dealing both with other companies (B2B), consumers (B2C), funders/investors, production companies, etc., and how do you create them? Which specific rules do you need to take into account when dealing with consumers (e.g. consumer rights incase of distance selling)? How can you enforce your contractual agreements?

All economic activity relies upon contracts. Cross-border business transactions are typically covered by the national contract law of the seller or buyer<sup>40</sup>. Even though the Commission has taken several initiatives in the areas of sales law, insurance contract law and cloud computing contracts, the conclusion of contracts in a B2B setting is still very much governed by the legal traditions of the Member States. The protection of the consumer has been harmonized through various consumer protection directives, yet this has not prevented further fragmentation.

***Other legal areas that could be further explored:***

- 1) In-app purchases and consumer law compliancy (consumer law)
- 2) Service Level Agreements (B2B, B2C)
- 3) Distance Selling Agreements
- 4) Cloud contracts (B2B, Consumer Law)

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<sup>40</sup> European Contract Law B2B, p. 26



## **Section 2. Step 2: Identification of the Main ICT Technology Trends over the Next 10-15 Years**

The impact of ICT advancements can hardly be predicted adequately. However, technological advancements will increase at a rapid pace. Even though law can guide practice, in reality technical evolution will most likely guide law. Our legal frameworks will most likely be ill-equipped to address the challenges brought forth by future technological evolution. Nevertheless, legal principles are necessary, as they benefit society as a whole. If legal principles are to stimulate innovation, whilst still preserving a sound environment in which mores are adhered to, there will be an increasing need to adjust laws in time and even to pro-actively seek solutions to future legal conundrums.

If we are to achieve these goals, it is necessary for legal professionals, but also for students, to be made aware of future trends that may cause legal shifts. It is still unclear how future trends will alter the legal landscape. As a consequence, it is quite difficult to pinpoint the exact impact they might have on current legal challenge areas. We have identified the following trends that are likely to impact the legal framework in which ICT start-ups operate: Future of Mobility, Connectivity & Convergence and Clicks and Bricks.

### **Observations**

- The following emerging trends are likely to have a considerable impact on the identified legal challenge areas:
  - Future of Mobility: Data Protection Law, but also Liability Law
  - Connectivity and Convergence: Data Protection, Consumer, E-Commerce, Corporate and Financing Law
  - Bricks and Clicks: E-Commerce Law
- At its current state, the legal rules in Europe seem incapable of dealing in a sufficient manner with the difficulties that lay ahead because the concepts on which current EU legislation is built, do not translate well to the (future) digital environment.
  - Many concepts and definitions within the present framework rely on traditional paradigms.
- In an ever evolving technological landscape such as the ICT sector, this may lead to a perpetual state of 'out datedness'. In turn, ICT start-ups face uncertainty, which stifles innovation.
- Building fertile soil for innovative entrepreneurs requires more than laws – it also depends on the educational context, financial incentives, cultural context, social environment, etc. – but the importance of robust and coherent legal rules are not to be underestimated.
- Existing rules must be modernised and a level playing field must be ensured, whereby legislative initiatives must take into account all parties involved.
- EU supported initiatives, such as ICT law clinics, stimulate students to think pro-actively. This enables the future generation to tackle tomorrow's societal challenges.



### **2.2.1. Future of Mobility**

The car industry is probably one of the most traditional industries in Europe. As the economy strives towards consumer empowerment and aims to increase personal experience, the car industry will follow. In the near future, the mobile industry will be characterized by an increasing trend towards personal or freight mobility as the preferred method of travel. Mobility will become integrated and combined with intelligent and smart technologies<sup>41</sup>.

#### ***IMPACT 1: Data Protection Law***

Connected car services bring along major privacy concerns and data protection legislation does not yet provide a clear-cut answer to some of the simpler questions. For instance, it is already quite tricky to determine who the data subject will be: the one driving the car or the registered owner of the vehicle? Given the likely co-operation between car manufacturers, software engineers and telecom operators during the production phase of connected cars, it is equally difficult to determine data ownership.

German Data Protection Authorities have recently issued a resolution on connected cars, in which they address the privacy risks involved with the growing collection and processing of personal data in cars. Considering the importance of the German automotive industry on both the European and global level, the resolution may have a broad impact on privacy afforded to connected cars. The resolution does not impose revolutionary obligations, yet it does contain elements that may already tackle some of the more fundamental issues related to connected cars.

First of all, the German authorities deemed it necessary to take into account the multitude of actors within the automotive industry. Data protection rules should not only be adhered by car manufacturers. Service providers, insurance companies, employers, but also software engineers and car mechanics will be able to have access to personal data and should therefore comply with several obligations. Transparency for the data subject is key. He needs to be fully aware as to who collects the data and for what purposes data will be collected. The German resolution therefore requires that any processing of data must be either contractually agreed upon, or must be based on explicit consent. In other words, data cannot be processed, even if this would be necessary for the purposes of the legitimate interests pursued by the controller, third-parties or parties to whom data is disclosed. Moreover, the data subject must be able to inform other users of the car.

The resolution also restates some other principles often quoted in the context of connected cars. Both the car manufacturer and the service provider must implement “privacy by design” and “privacy by default” when developing new products. Data should only be gathered if necessary, and the collection thereof should be kept at a minimum. If no longer needed, data should be deleted. The data subject should have the possibility to recognize, control and stop data transfers between actors in the industry.

#### ***IMPACT 2: Liability***

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<sup>41</sup> Frost and Sullivan, *Top Global Megatrends to 2025 and Implications to Business, Society, and Cultures* (2014)



The impact of future mobility services on ICT start-ups may very well go beyond the identified legal challenge areas. The technological advancements towards automated cars may place more responsibility on ICT start-ups, particularly with respect to their liability. Most liability regimes within Europe are founded on fault liability, whereby liability is established once there is a causal link between fault and damages. However, as cars become more integrated with technology, the assessment as to who should be considered responsible for certain types of damages will become increasingly difficult. Even though drivers are sometimes forgiven for their mistakes, as decisions may have to be made in a split-second, such leniency may not be present if accidents are caused by faulty software programming.

### **2.2.2. Connectivity and Convergence**

The Internet has started a verified revolution. The **world wide web** has become more and more structured, creating an interconnected ecosystem for those who have access to an internet connection. New and current technologies will unlock innovative applications influencing our communication and economy. The future is one of connectivity and convergence<sup>42</sup>, and studies indicate that this trend will continue, with 5 billion Internet users and 80 Billion Connected devices worldwide by 2020<sup>43</sup>.

These trends have already materialized. Often referred to as the Collaborative or Sharing Economy, interconnectivity has enabled a social economy whereby human and physical assets are shared worldwide through the collaboration between individuals (e.g. airBnB).

#### **IMPACT 1: Privacy and Data Protection Law**

Data, whether it be user, government or scientific data, has become the raw material for many innovative applications. The amount of data undertakings will be able to collect is expected to grow tremendously due to connectivity and big data. The global Big Data market is expected to generate a revenue of over 122 billion dollars by 2025<sup>44</sup>. As a result, big data analytics is one of the main emerging industries of the future. Especially in the marketing sector big data can be considered the Holy Grail, as it allows marketers to target customers precisely and efficiently. In a connected world, the precision and relevance of service delivery will most likely increase due to efficient use of location and time data. Although the proposed EU Data Protection regulation has implemented additional safeguards against Big Data abuse, some elements may need particular caution.

Due to the increased importance of data as a driver for innovation, the data subjects must have full awareness as the purposes for which data will be collected and to whom it may be disclosed. As more and more data relating to individuals will be collected, the data subject must also have the ability to access that data in order to ascertain the accuracy and completeness thereof. Additionally, the data subject must have a right to correct that information.

However, additional elements may have to be taken into account when drafting future laws. Even though data analytics can serve as a catalyst for value-added services, the individual's right to self-determination may be at risk. Even though most end-users are aware of the existence of targeted

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<sup>42</sup> Frost and Sullivan, *Top Global Megatrends to 2025 and Implications to Business, Society, and Cultures* (2014)

<sup>43</sup> Ibid.

<sup>44</sup> Ibid.



advertising, the exposure thereof may have an impact on our subconscious. The access to data by governments may invoke dystopian images, but brands and commercial operators may, through big data analytics, influence our behavior as well, which may lead to so called brand totalitarianism. Therefore future regulation may have to take into account psychological studies to determine the instances where big data knowledge could be applied and how this could be done without exposing us to potential risk. In other words, the regulation of profiling measures should be taken into close regard.

Even though start-ups prefer consent as the basis for their data processing activities, the notion among start-ups that consent is 'the way to go' may have to be abandoned. Some even state that the concept of 'free consent' is dead. Indeed, it seems that the average knowledgeable individual will no longer be capable to grasp what happens with the data he is putting on the net. Should we increase the obligations of the controller, or should citizens be made more aware of their Internet habits<sup>45</sup>?

#### **IMPACT 2: E-Commerce**

Virtual currency's characteristics of anonymity, transferability and independence may make it the preferred payment method within peer-to-peer networks. The regulation of virtual currencies, and crypto currencies in particular may thus become necessary, especially considering the many warnings given in the past concerning the potential dangers of such payment methods. As mentioned before, the regulatory approach between MS differs and

#### **IMPACT 3: Corporate Transactions**

Connectivity empowers consumers. This will also affect future investment models. Crowdfunding as a means to start-up one's business is an investment mechanism very much in the spirit of the connectivity trend. Start-ups may no longer rely on traditional financial institutions to acquire funds: they have the entire world for which they can ask money. Considering the divergent approach of Member States towards crowdfunding, further harmonization may thus become necessary.

Additionally, peer-to-peer lending (P2PL) methods may gain popularity. P2PL is the practice of lending money to unrelated individuals. However, unlike traditional lending models, P2PL does not require mediation of a financial intermediary, such as a bank or financial institution. The financial crisis of the late 2000's, resulted in a decrease of trust in traditional financial institutions. For start-ups P2PL Even though peer-2-peer- lending models are still at an early stage of development, it is quite difficult to determine whether these platforms must comply with the legal regime applicable to credit institutions. Moreover, adequate protection must be guaranteed to the users of these networks.

#### **Impact 4: Consumer Law**

The collaborative economy enables an increased interaction between consumers. Peer-2-peer business models will become more prevalent. The 'brand', i.e. start-up, will act as the platform and will enable end-users to share physical or intangible assets among each other. However, due to the increased interaction between end-users, it will be increasingly difficult to separate 'consumer' from 'trader'. The definition of the latter determines who should apply consumer protection rules and who should ultimately be held liable for the infringement thereof. Nevertheless, as end-user interaction increases, the

<sup>45</sup> Message to retain from the IAPP conference in Brussels  
<[http://www.koan.be/\\_file/\\_upload/311faf4c484402d494d3b411c3732ae7\\_IAPP\\_Report\\_\\_00900395.pdf](http://www.koan.be/_file/_upload/311faf4c484402d494d3b411c3732ae7_IAPP_Report__00900395.pdf)>



distinction between 'trader' and 'consumer' will become increasingly blurry. Additional guidelines will therefore be necessary to ensure consumer safety, but also to increase transparency among users of peer-to-peer networks.

The current application of consumer protection legislation does not allow an easy answer to certain questions. Should the platform operator, for instance, still be considered the trader in peer-to-peer networks, as he only acts as a facilitator among users? And if so, in what circumstances should he be held liable for non-compliance by users within the network, given the fact that within these peer-to-peer situations, the end-user may act as the immediate counterparty.

### **2.2.3. Bricks and Clicks**

The term 'bricks and clicks' exemplifies the new era of commercial activity. The term is a reference to the traditional 'bricks and mortar' business model. In a digital environment however, goods and services are no longer traded through the traditional retailer environment. During recent years, growth rates in mature markets have begun to slow down. Sustainability thus requires retailers to expand their borders to meet new growth targets<sup>46</sup>. Up until now, expansion efforts have focused on new brick-and-mortar store openings. But by the year 2025, it is expected that bricks and clicks will become the retailing norm of the future, with every retailer having an online identity as well as a brick and mortar presence.

### **Section 2. Step 3: Conclusion (Based on Step 1 and 2)**

As Yogi Berra said: "It's tough to make predictions, especially about the future." Given the limited scope and timeframe for this deliverable, it is not our objective to judge how EU policy approaches should shift. However, the future trends described above may give some indication on how the legal environment will evolve, or even how the legal environment should evolve. At its current state, the legal rules in Europe seem incapable of dealing in a sufficient manner with the difficulties that lay ahead.

What came out as striking in this deliverable, is that the concepts on which current EU legislation is built, do not translate well to the (future digital) environment. Many definitions within the present framework still have a close link with the traditional paradigms. Perhaps this is the most obvious in consumer legislation. The recent Consumer Protection Directive, which tried to align consumer protection with developments on the Internet<sup>47</sup>, is still very much based on the distinction between consumer and trader. But as we have seen, peer-to-peer networks will increase in popularity. In these networks 'traders' are absent. How can we then provide sufficient protection to the consumers? However, the increased interaction between end-users influences every legal area: financial law, e-commerce, privacy and data protection... The problem therefore lies not in the principles promoted by the European legislation, but by its heavy reliance on concepts and definitions. Traditional concepts such as consent and lending, may, as a result of innovation, become less relevant. And even though these concepts could be further clarified or interpreted in a manner that they take into account

<sup>46</sup> Deloitte, *From Bricks to Clicks: Generating Global Growth through eCommerce Expansion* (2014)

<sup>47</sup> Commission Staff Working Document accompanying the proposal for a directive on consumer rights Impact Assessment Report.



technological development by the Courts, such an approach takes time. In an ever evolving technological landscape such as the ICT sector, this may lead to a perpetual state of 'out datedness'. In turn, ICT start-ups face legal uncertainty, stifling innovation.

There is a clear role for the EU to ensure consistency in the way legal frameworks develop within Europe. Building fertile soil for innovative entrepreneurs surely requires more than laws – it also depends on the educational context, financial incentives, cultural context, social environment, etc. – but the importance of robust and coherent legal rules are not to be underestimated. By investing in the modernization of existing rules and ensuring a level playing field throughout Europe, the EU can increase legal certainty for all parties involved. When preparing legislative initiatives or reforms, the EU should be keen to have all voices –not only established actors, but also smaller entrepreneurs with limited financial means – represented in the policy debate. Also through EU supported initiatives like the ICT law clinics, new generations of (law) students are stimulated to think pro-actively about the appropriate legal setting for a climate of dynamism and innovation in Europe. They will be better trained (and ICT start-ups better equipped) to tackle tomorrow's societal challenges. Or, to use the words of Abraham Lincoln: "The best way to predict your future is to create it."



### Section 3: Recommendations for Legal Incubators

The following section will provide a set of recommendations for the emerging legal incubators to ensure that they can address the current and future legal requirements of start-ups. These recommendations are based on both the results of the survey and the conclusion drawn from the previous section.

#### 3.1. General recommendations based on the results of the survey

1) Continuity is key. On-going legal counselling that is specifically catered towards start-ups benefits the adequacy of the advice received. Moreover, ICT start-ups appreciate a personal approach, especially in an early phase: one-to-one consultations are to be preferred. After this initial stage, advice could be given on a one-to-many or portal basis.

2) Even though most start-ups are willing to pay for the services of law clinics, their budget is still quite limited. Paid services should therefore not be higher than 1000 euros. Considering that the willingness to pay is often related to the degree of annual revenue, law clinics could implement a gradual cost structure. Legal clinics must keep in mind that most start-ups consider the cost of legal advice, as well as difficulty of finding the right legal advice as threshold for seeking legal advice. Consequently, law clinics may have to keep prices as low as possible (or even non-existent).

3) The lack of legal awareness - and thus the need for legal advice - tends to be higher for small-scale ICT start-ups. As these start-ups also often lack the means to seek professional legal counseling, an increased presence of law clinics could address a market need. In order to prevent free-rider behavior, clinic based advice could be limited to those start-ups having an annual revenue under 100.000 euro.

4) Finding the right legal advice is difficult. Law clinics must create awareness that their services exist. Though advice given by students might not be as adequate as the advice given by professionals, students have a basic knowledge of most legal domains. With appropriate guidance of professionals, legal clinics could already pinpoint legal problem areas. Legal clinics can thus be a very much needed stepping stone towards proper legal advice.

5) Promote the availability of and make use of the International network of universities. Start-ups value this highly.

6) Keep in mind the legal tradition of your country as this will influence the legal structure of the law clinic. Not all legal clinics will be allowed to give blanket recommendations with a legal disclaimer attached to it. Universities can't exonerate liability for the advice they give. Be sure to implement a structure that can tackle accountability and liability.

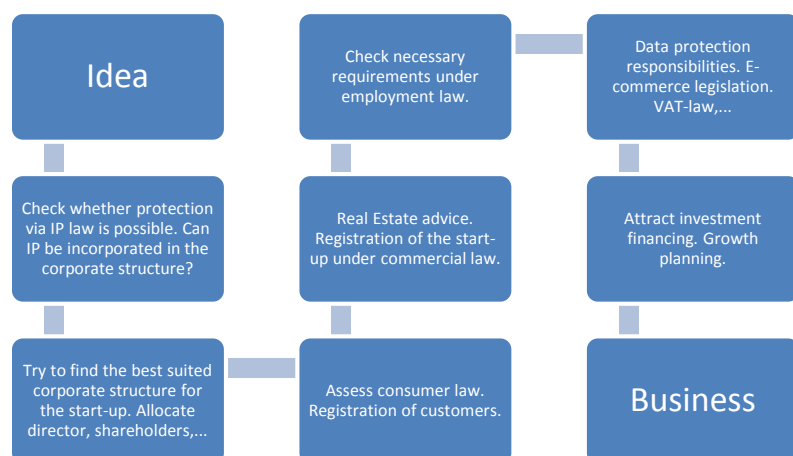
7) Manage client's, student's and law firms' expectations. Be transparent: legal clinics cannot provide advice in a manner comparable to professional firms. Start-ups should be informed that they are dealing



with students who are still in the learning process. Hence, transparency must be given as to which questions will be treated, by whom and within what timeframe.

8) Keep in mind the expectations of the start-up. Check the current needs of those you advise. Needs differ depending on the phase the start-up is in.

This time line may help:



### 3.2. Recommendations based on Legal Challenges areas and Future Trends.

1) ICT start-ups need advice the most in the following four legal areas: Privacy and Data Protection Law, Intellectual Property Law, Contract Law and Consumer Law and Terms and Conditions.

However: Start-ups must not only be made aware of the current legal framework. Not only will the legal framework within those areas change due to regulator activity (planned regulation), but future trends will also necessitate a different approach to some of the legal issues involved.

As it appears that the majority of ICT start-ups are either unaware of future change, or would not be able to adapt to changes in the legal framework, law incubators should have a pro-active role in raising the awareness of start-ups.

2) Transparency is necessary. Legal incubators are embedded within a scholarly environment. Not all questions of start-ups can therefore be tackled. Education of students is important. Therefore it may be best to tackle the most educational questions start-ups have. Whereby previous advice given can be stored in a know-how database. This would allow students to focus on the most relevant questions.

3) Make use of the university environment. Law students will not be able to predict or anticipate future change without general knowledge of future ICT developments. If advice is to be given in a pro-active



manner, an understanding of how technology can impact the legal framework is important. Laws will be ill-equipped when certain future technologies arise and it will not always be easy to translate traditional legal principles to the digital environment. However current law students are the law makers of the future. Make use of the interaction that is possible between the different faculties. Scientists, philosophers, engineers ... All these parties can have valuable input on how the legal framework might look like in the future. Interdisciplinary thinking will become necessary in a setting where laws are outdated due to technological progress.

4) Universities are public institutions. Unlike law firms, incubators are not entirely tied to the law as is. Legal incubators, due to their status and close relationship to other disciplines, can push boundaries. Clinics can use the information gathered to help change policy making. Therefore they can have an impulse on the creation of law how it should be.

5) Legal clinics should create a synergy between law and technology. Use vast knowledge data-base to influence the provision of advice. Legal clinics can help in bridging the gap between law and technology through close interaction.

6) Legal Clinics should share their experiences with other clinics. It is necessary to share your best practices, learn from each other's mistakes. Legal clinics perform multiple functions. Look at how educational value for students could increase, but also keep in mind that start-ups must be advised in an adequate manner.

7) Even though a lot of universities want to advise start-ups, it is often quite difficult to find the funding. Legal clinics should also their experiences in this regard: How could legal clinics fund their operations on a long-term basis? However, legal traditions must be kept in mind. The start-up of a legal clinics will therefore differ from country to country.

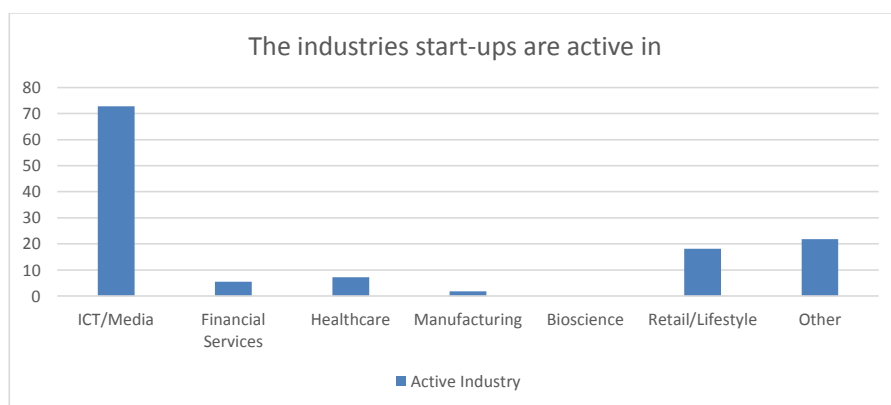


## Appendices

### Appendix I: Section 1. General Overview of the Survey (Detailed Version)

The iLinc survey has gathered responses from 57 European start-ups, active within a variety of industries and countries<sup>48</sup>. The majority of European start-ups operate within the ICT and or media industry (75%). Nevertheless, all participating start-ups were active within the digital environment, or made use of information and communication technologies. The services provided by these start-ups were quite diverse, and included: e-learning, e-payments, event planning, crowdfunding and 3D imaging. Due to the wide variety of services offered by the participating start-ups, a further division into sub-sections was deemed inappropriate.

It is important to note that a significant amount of the involved start-ups (21%) could be categorised under the sharing economy. The sharing or collaborative economy refers to a socio-economic ecosystem in which certain assets are shared among peers (eg. knowledge, educational tools, funds)<sup>49</sup>. An example of the latter is PiggyBee, a Belgian start-up that offers eco-friendly shipping by travelers<sup>50</sup>. Those start-ups who provided 'other' as an answer did not necessarily fall outside the scope of the other categories, rather they provided services which could be considered to overlap with the provided areas, such as e-learning services or the development of video games.



Appendix 1. Figure 1

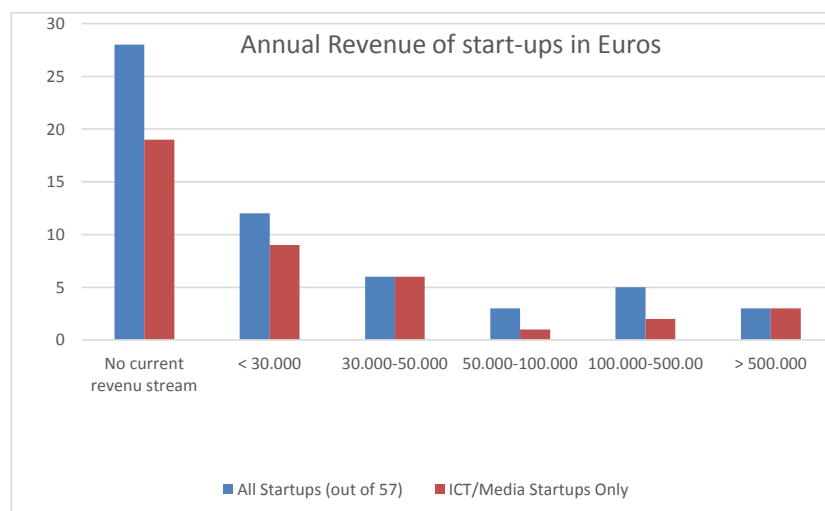
For comparison purposes, we have often used company size (based on annual revenue) as an extra determinant for comparing the answers provided by the start-ups. Findings based on this comparison

<sup>49</sup> See infra Connectivity and Convergence

<sup>50</sup> <http://www.piggybee.com/>



take into account the answers provided by all start-ups. This may provide extra insight in some of the goals set out by the survey, e.g. determine which legal start-ups would benefit most from legal advice offered by legal incubators. Given the fact that the great majority operate within the ICT realm in the broadest sense of the word, i.e. are dependent upon ICT for the development or provision of their services or have legal issues related to ICT law, some questions will be analysed on the basis of all respondents and others will be confined to those who indicated ICT/Media as their specific area of operation.



Appendix 1. Figure 2

Out of the 57 respondents, 28 currently have no revenue stream, 30 start-ups already have an annual revenue stream, yet the amount received on an annual basis varies. Most start-ups who do have a revenue stream, have one under 50.000 euros. A small group of start-ups already have an annual revenue stream of over 100.000 euros, yet only 3 start-ups have already earned more than 500.000 euros (all 3 were active within the area of ICT).