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Empirics-oriented Behavior-over-time Model Building for a Simulated Long-term Transition Towards a Harmonized Private International Law for E-business

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Abstract

Jurisdiction and applicable law determine key contract parameters for dispute resolution in cross-border business transactions. Each sovereign state may define its own Private International Law (PIL) governing the state-specific set of factors based on which own or foreign jurisdiction is established. Jurisdiction indicates which state's courts are authorized to hear and decide on a potential contract conflict, while applicable law indicates under which state's law a court decision shall be found. The directly comparable approach with state-specific connecting factors is in place with respect to applicable law. This territorial approach to dispute resolution makes PIL a highly complex field of law.

A thorough assessment in previous research revealed that service providers and consumers are confronted with a high level of jurisdictional risk and uncertainty when doing international electronic business in the Internet. This is mainly due to the fact there is no harmonized set of rules that applies specifically to the (near-) global and (by design) border less infrastructure of the Internet and, thus, to contracts concluded in the Internet. Therefore, a transition towards a single, internationally harmonized PIL for electronic business in the Internet is perceived as the dominant long-term strategy in order to foster certainty and trust in international electronic business. Such transition needs time as it involves a large number of stakeholders with diverging agendas, interests and objectives.

Accordingly, the overall research question has been determined in identifying and understanding new strategy implications that may result for different strategy proposals and scenarios assumptions from a long-term transition to a harmonized, electronic business-compatible PIL in an interconnected system of service providers, consumers, legislators, courts, lawyers and lobbyist. System dynamics was chosen as an appropriate modeling approach for understanding this complex system and the implications emerging in it from the transition modeled.

System dynamics-based model building is a multi-step procedure. Important steps, such as the identification of relevant stakeholders as well as the modeling of causalities, have been achieved as previous research.

In this context, this thesis at hand is motivated by provided the relevant data collection and analysis that will facilitate the achievement if the next modeling step, i.e., a mathematical model formulation. This implies a number of challenges are addressed to achieve the determined objectives of identification of key indicator and behavior-over-time graphs. To attain this, as the first step actors representing stakeholders are recognized. Subsequently, empirics and knowledge from stakeholders are retrieved and logically analyzed. This helped to understand the preference of the stakeholder in greater depth. Based on the

understanding about the preferences of stakeholders key indicators per stakeholder have been identified. Next, for all the key indicators, behavior-over-time graphs are drawn. This graph uses a time unit- embracing the complete modeling time horizon of 30 years- for the x-axis and the respective applicable unit for the indicator in question for y-axis. The unit for the y-axis has also been identified on the basis of the data collected from the stakeholders.

Kurzfassung

Der Gerichtsstand und das anwendbare Recht bestimmen wichtige Vertragsparameter fuer die Resolution der Streitbeilegung in den grenzueberschreitenden Geschaeften. Jede souveraeene Staat kann sein eigen bestimmt Faktoren fuer das Internationales Privatrecht (IPR) festlegen, die die eigene oder fremde Rechtsprechung bestimmen. Der Gerichtsstand legt fest, welche staatliche Gerichte befugt sind, um die Streitigkeiten anzuhoren und in einem Vertragskonflikt zu entscheiden. Das anwendbare Recht bestimmt, welches staatliches Gesetz eine gerichtliche Entscheidung herbeifuehren soll. Das direkt vergleichbare vorgehen ist mit den Staats spezifischen faktoren in Bezug auf das anwendbare Recht bestimmend. Dieses territoriale vorgehen zur Streitbeilegung macht PIL ein hochkomplexes Rechtsfeld.

Eine eingehende Einschaetzung der bisherigen Forschung ergab, dass die Dienstleister und die Verbraucher im internationalen elektronischen Geschaeftsverkeher im Internet mit einem hohen Ma an Risiko und Unsicherheit konfrontiert sind. Dies ist vor allem aufgrund der Tatsache, dass es kein harmonisiertes Regelwerk gibt; dies gilt insbesondere fuer die regionale und globale Infrastruktur des Internets und die Vertraege die im Internet abgeschlossen werden. Deshalb wird ein Ubergang zu einer einzigen international harmonisierte PIL fuer den elektronischen Geschaeftsverkehr im Internet als dominante langfristige Strategie wahrgenommen, um Sicherheit und Vertrauen in der internationalen elektronischen Geschaeftsverkehr zu foerdern. Eine solche Umstellung braucht Zeit, da es eine groe Anzahl von Akteure mit unterschiedlichen Agenden, Interessen und Ziele vorhanden sind.

Dementsprechend ist das Ziel der gesamten Forschung die Implikationen der neuen Strategien zu identifizieren und zu verstehen, welche andere Strategie-Vorschle und Voraussetzungen fr andere Szenarien fuer eine langfristige Umstellung zu einem harmonisierten Electronic Business-kompatibel IPR in ein interdependenten System der Anbieter, der Verbraucher, die Gesetzgebung, die Gerichte, die Anwltte und die Lobbyisten fhren knnen. System Dynamics wurde als geeignetes Modellierungsansatz fr das Verstdnis dieses komplexen Systems ausgewhlt und die sich daraus resultierenden Auswirkungen fr den modellierten Ubergang zu begreifen.

System Dynamics basierte Modell ist ein mehrstufiges Vorgehen. Wichtige Schritte, beispielsweise die Identifikation der relevanten Akteure sowie die Modellierung von Kausalitaeten, wurden aus der bisherige Forschung erzielt.

In diesem Zusammenhang wird diese Dissertation durch die entsprechende Datenerfassung und Analyse motiviert, die die Erreichung des nchsten Schrittes, naemlich Modellierung,

d.h. Formulierung eines mathematischen Modells, erleichtert. Eine Reihe von Herausforderungen werden angesprochen um die ermittelten Ziele zur Identifikation der Key Indicators und deren Verhalten-ueber-Zeit-Diagramme zu erreichen. Die erste Schritt um dies zu erreichen, ist die Identifikation der Organisationen die die jeweiligen Akteure vertreten. Anschliessend werden die Empirie und das Wissen der beteiligten Organisationen gesammelt, zusammengestellt und logisch analysiert. Dies hat geholfen um die Bevorzugungen der Akteure in Detail zu verstehen. Basierend auf dem Verstaendnis der Praeferenzen der Akteure sowie der vorliegenden Empirie werden die Key Indicators pro Akteur festgelegt. Als naechstes wurden fr alle Key Indicators die Verhalten-ueber-Zeit-Diagramme erstellt. Diesen Diagrammen werden fuer die Komplete Modellierung ein Zeithorizont von 30 Jahre fuer die x-Achse und der jeweils geltenden Einheit fuer den betreffenden Key- Indicator fuer die y-Achse Zugrundelegen. Die Einheiten fuer die y-Achse wurden auch auf grund der Daten, die von der betroffenen Akteure gesammelt worden sind, festgelegt.

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Chapter 1

Introduction and Motivation

Internet today is omnipresent and is a critical infrastructure for expanding the international service market. In current times not only it has a global outreach but also offers a plethora of services and applications. It has altered the dynamics of the process of services radically. Once a service is created and published, it is immediately accessible from anywhere in the world. At the very least, persons throughout the globe can access the service, but often they will also be able to order and download services from it. This global presence raises a number of pressing questions from a PIL perspective: If a service or other online presence establishes a connection with every country in the world, which courts should have jurisdiction over disputes resulting from such presence and which laws should be relied upon to resolve them? This feature of the Internet and the questions which it entails have been an important driving force behind the interest, at the multilateral level, in PIL.

1.1 Motivation

In the intensifying global economy exchanging services comes with an unknown risk in case of any disputes. Involvement of foreign language, foreign courts, foreign laws and cost involved for solving the dispute contribute, among various other factors, majorly towards the element of risk. Owing to such an international context, cross-border business transactions are prone to more uncertainty. Disputes can be stressful, time-consuming and financially devastating. This is why a harmonized process is desired which reduces the uncertainty involved in the process. As any other dispute resolution process, jurisdiction and applicable law determine key contract parameters even in case when the service provider and the service customer involved in the dispute have relations to different legal domains. Jurisdiction means which state's court are authorized to hear and decide in a contractual dispute, and applicable law says under which state's law such decision shall be found. However, when the contract parties have different international backgrounds then the risk factor increases, specially for the weaker party- the service consumer.

The parties involved in service contract, the service provider and the service customer, are prone to high level of jurisdiction risk when doing international electronic business in

the Internet. The main reason behind this is that each sovereign state has its own PIL, having state specific conditions and laws which leads to non uniformity in law at a global level.

The fundamental difficulty in coping with legal relationships (contract) involving foreign elements flows from the fact that the legal systems of more than one country may reasonably be found to have a connection with the contract. One solution to this problem consists of selecting, based on connecting factors, from among the various potentially applicable legal systems, the laws of one particular legal system, to govern the legal relationship. This, in essence, is the exercise of determining the applicable law under a PIL approach. It is also the solution which encroaches the least on existing national law, because it requires no changes to such law in order to resolve the problem posed by the presence of the foreign element.

A radically different solution, which is much more intrusive on existing national law, consists of trying to remove, through a process of harmonization, the source of the problem by eliminating the differences that exist between the laws of countries on a given issue. Harmonization is achieved through the negotiation between states of treaties establishing uniform rules. However, such a transition is complex as well as time consuming. As it involves many stakeholders like service customer, service provider, lobbyist etc. having varied interests and objectives. As a consequence an open research question was posed to identify and understand the new strategy implications that may result for different strategy proposals and scenario assumptions from a long-term transition to a harmonized, electronic business-compatible PIL in an interconnected system of various stakeholders.

System dynamics, owing to its inherent nature of understanding complex system, was chosen for understanding the implications emerging from the transition modeled. The identification of stakeholders as well as the modeling of causalities, have already been achieved in a joint effort by experts of University of Zurich and the University of Ljubljana. In this context the thesis in hand is motivated by providing the relevant data collection and analysis that will facilitate the achievement of the next modeling step, i.e, mathematical model formulation. A major effort is expected in identifying potentially comparable cases and in retrieving relevant empirics for (at least partly) comparable cases in direct contact with representatives and bodies involved in a studied case. Equally, the assessment on how behavior-over-time graphs for the identified key indicators would be, is expected to contribute considerably to the overall thesis effort and complexity. The detailed description and scope of work is provided in the next section.

1.2 Description of Work

The entire task of achieving the harmonization of PIL can be seen as a result from various steps shown in the Figure 1.1. The first step towards building a harmonized process started with identifying the set of relevant stakeholders within the model that envisions the long-term introduction (30 years period) of a harmonized Private International Law (PIL) applicable to electronic services in the Internet - in particular with respect to questions of dispute resolution out of a contract with international connection, namely jurisdiction

and applicable law. In dispute resolution a set of relevant stakeholders embraces all actors that have a stake - i.e., that are involved - in the resolution of a given dispute.

The second step included the modeling of causality diagram which denotes how the stakeholders are effected by each other and various other factors or variables which influence them in such a model. These two steps were already achieved as a result of previous research and forms the basis for the thesis in hand. The present work comprises of identifying the key indicators for each stakeholder based on the causality model already developed. Although, there can be various factors effecting the stakeholders directly or indirectly, but owing to the scalability of the underlying system dynamic modeling it is of utmost importance to identify the factors in which stakeholders have maximum interest. These variable of prime importance are termed as key indicators. Once the key indicators for the specified scenario have been determined the next step is to describe and predict the behavior of these variable with respect to time in form of so called behavior-over-time graph. The goal of these graphs, for each indicator per stakeholder, is to describe the variation of value, in terms of unit specified, for the entire modeling period. The bases for expected behavior-time graphs and identification of key indicators is the expert knowledge derived from empiric data of comparable cases and/ or logical argumentation.

Also, there would be additional steps taken in order to successfully bring such a harmonization in place which will take the results from this thesis as its basis and would be completed as a future work.

In the scope of the work described above following milestones are identified :

- **Study of relevant background**

Establishing the relevant background needed for this thesis. In particular this includes PIL, system dynamics modeling, the overall modeling procedure foreseen in which this thesis is embedded, and the already available modeling results.

- **Selection and specification of key indicators**

Developing a key indicator selection method covering the suited set of selection criteria for the key indicators.

- **Identification of comparable cases and acquisition of empirics**

Developing a method for identifying and assessing (potentially) comparable cases. This also covers identifying the relevant information needed- in terms of quantified empirics- in order to conclude behavior-over-time.

- **Behavior-over-time graphs for all key indicators**

Producing behavior-over-time graphs for all the key indicators considered, either based on obtained empirics or from sound line of arguments.

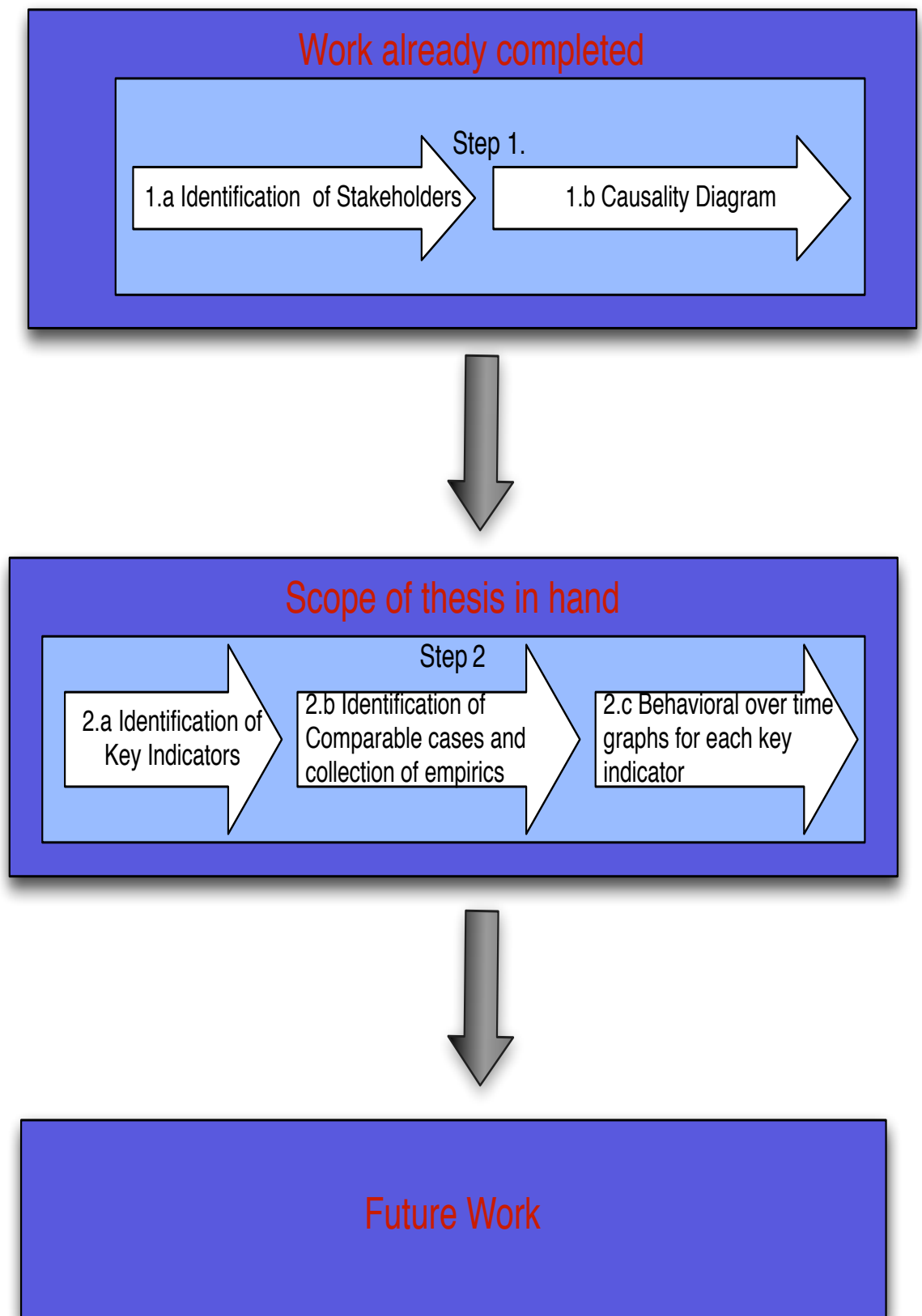


Figure 1.1: The Main Stages While Modeling the Harmonization of PIL

1.3 Thesis Outline

Chapter 2 includes details about the related work studied in order to gain insight into Harmonization of PIL and System Dynamics in terms of their definitions and their relevance to this work. Also, the results of previous research efforts are studied and explained.

Chapter 3 explains the set of key challenges faced while trying to achieve the desired objectives and throws light on the scientific approach chosen to achieve the objectives identified for the thesis at hand. This includes the methodology chosen for not only data collection from the stakeholders but also for the analysis of the data and their consequent use in identifying the key indicators and behavior-over-time graphs.

Chapter 4 covers the major contribution of the work in hand and the results from various sub steps that were taken to achieve the identified milestones. The identified objectives are explained in detail with the corresponding results.

Chapter 5 is about the summary and conclusions of the work in hand.

Chapter 2

Background and Related Work

This chapter covers the fundamental background like PIL, Harmonization of PIL, system dynamics modeling, and the already available modeling results which form the basis of this thesis. Since directly related work in the sense of comparable approaches and efforts hardly exist, this chapter provides an overview of the important thematic areas covered in the work. The aim of this chapter is to give an insight to not only the efforts made in relation to harmonization of PIL, but also throws light on the existing results of the effort already being made as a part of research in CSG department. Thus the goal of the chapter is two-fold: Throwing light on the distinct efforts made with respect to Harmonization of PIL, introduction of terms and terminology and existing results which form the basis of the work in hand. The mentioned goals are important to achieve since the underlying scenario aims to achieve a harmonized PIL with a short track procedure for disputes arising from contracts between consumer and service provider. Also the modeling method offers restrictions which must be kept in mind while doing the steps which are within the scope of the thesis in hand. Hence, basic understanding of the aforementioned themes would not only give glimpse about the efforts made in the similar direction in the past but also give a guideline for the current work.

2.1 Unification of Private International Law

The federal office of Justice [4], Switzerland, defines PIL as a set of rules of law that determine which court has jurisdiction and which law govern a given legal dispute. However, as simple as it may look the identification of the jurisdiction and the applicable law is a complex task in an international context because of various connecting factors involved. As a consequence, harmonization of PIL is a foreseen step towards the identification of jurisdiction and applicable law with lesser uncertainty, hence reducing the risk involved in the process of dispute resolution. The impulse to reduce diversity among the legal systems governing commercial activities has manifested itself since the times people have traded across political boundaries. Following sections acknowledge the importance of harmonization of PIL and reasons for choosing system dynamics as a modeling approach.

2.1.1 Private International Law and Conflicts of Law

With the increasing penetration of the Internet in global economy, integration and diversity are two key aspects of present commercial activities. But, these two aspects also contribute significantly towards the conflict in laws. The exchange of services by enhanced modes of transport provided by technological advancements is highly diverse and decentralized. However the aiding tool, of law, facilitating the process of exchange itself is restricted and specific to territorial boundaries. In a world of multiple legal systems and uncertainty where things will go wrong, the parties worry about the divergent rules applying to their disputes.

Consider a scenario, where a consumer buys a service online and that the service is provided at one place and the service provider hold infrastructure at a different place. Knowing that this divergence exists, parties may act opportunistically, such as by claiming a default and filing a suit in a jurisdiction having favorable rules and practices. In such a case, the consumer in specific is prone to higher risk as compared to service provider as he might have less or no legal counsel at hand and may also not have equal money at disposal. In such a case it is very essential to have a unified law available so that not only risk on the consumer side is minimized but also a more understandable legal framework is available. A legal system that allows parties to form clear legal commitments with predictable consequences makes it easier for people to rely on each other and thereby extends the realm of productive cooperative behavior. The work in hand focuses on business to consumer(B2C) contracts that too specific to electronic services bought by a consumer, for his personal use, from a service provider. Harmonization of PILs would render higher stability and predictability in international commercial relations. If there is greater clarity of laws, the cost as well as the risk involved can be decreased. In the current scenario, the law has cultural, linguistic differences across the globe and harmonization of PIL would not only bridge the difference but also lead to more reliable environment for commercial activities having international context [18].

2.1.2 Related Efforts towards Harmonization of PIL

Harmonization in the field of PIL has mainly been focused on conflict of law rules. In the field of international commercial matters and contractual disputes in particular, little unification has been achieved at a world wide level. However, regional unification has proved successful in Europe and Latin America. The 1968 Brussels Convention on Jurisdiction and Enforcement of Judgements has proved to be a successful regional harmonization rule for Europe. Latin American states have unification related to both private international law treaties and a comprehensive code for private international law. Currently harmonization of PIL in Latin America is under Specialized Conferences on Private International Law (CIDIP). However, its work has restricted scope and deals with very specific areas of international judicial cooperation.

To apply one national legal system as against another may never be an entirely satisfactory approach. The parties' interests may always be better protected by applying a law conceived with international realities in mind. The Hague Conference on PIL (HCCH) is

a treaty organization that oversees conventions designed to develop a uniform system. 71 nations are currently members of Hague convention, which work for unification of rules of PIL [2]. The HCCH adopted three conventions namely, The Convention of 15 April 1958 on the Jurisdiction of the Selected Forum of Sales of Goods, The Convention of 25 November 1965 on the Choice of Court, The Convention of 1 February 1971 on the Recognition and Enforcement of Foreign Judgement in Civil and Commercial Matters, directly and indirectly dealing with international jurisdiction in commercial disputes. However, there is no practical relevance as only 3 countries brought these conventions in force. At the Seventeenth Session of HCCH in May 1993, it was decided to work on harmonization in field of commerce and civil matters. While considering the nature of a possible world-wide convention, the working group compared the Brussels convention and the convention of 1971 Hague Conference. A draft was made based on these two conventions which had compromises suggested by experts. However, in the conference the compromise reached was questioned and the proposal of turning the draft into a convention was rejected. After this HCCH decided to cover hard core issues like the choice of court, defendant's domicile etc. one by one. But that also failed owing to the complexity and wide scope.

No matter even if the efforts have failed and the conventions have not been ratified they have an influence upon the legal system in both Member and non-Member States. They also form a source of inspiration for efforts to unify PIL at regional or global level.

There are also efforts by experts who draft international instruments for harmonization which serve as a recommendation for national legislators. The International Institute for the Unification of Private Law (UNIDROIT) is one such organization whose objective is to establish a balanced set of rules designed for use throughout the world irrespective of the legal traditions and the economic and political conditions of the countries in which they are to be applied. UNIDROIT principles are sufficiently flexible to take account of the constantly changing circumstances brought about by the technological and economic developments affecting cross-border trade practice. At the same time they attempt to ensure fairness in international commercial relations by expressly stating the general duty of the parties to act in accordance with good faith and fair dealing and, in a number of specific instances, imposing standards of reasonable behavior.

2.2 System Dynamics Modeling

Owing to inherent complexity of long-term transition to a harmonized, electronic business-compatible PIL in an interconnected and interdependent system of various stakeholders, system dynamics was chosen as the modeling approach for getting an insight of complex system. System dynamics is a mathematical and methodological model for understanding the complex behavior of dynamic systems [7]. It is the method to enhance learning in complex system. Just as an airline uses a flight simulator to help the pilots learn, system dynamics helps to learn about the dynamic complexity of a system which deals with real world. It helps us to simulate a decided policy of a system under consideration and improve it based on the results of simulation. The main principal while modeling a system dynamics is to model a problem and not a system. In system dynamics the problem under consideration is represented in a form of a causal loop diagram depicting the connection

and interaction of the constitute components of the system. The causal diagram helps in understanding the overall structure of complex system and aids in depicting the behavior of system over time. In system dynamic modeling though there is no universally accepted process for developing and using good quality system dynamics models there are some basic practices that are quite commonly used. These steps are briefly described below:

- **Issue statement**

The issue statement is simply a statement of the problem that makes it clear what the purpose of the model will be. Clarity of purpose is essential to effective model development. Developing a model of a system or process without specifying how the system needs to be improved or what specific behavior is problematic is difficult. Having a clear problem in mind makes it easier to develop models with good practical applicability.

- **Variable Identification**

Identify some key quantities that will need to be included in the model for the model to be able to address the issues at hand.

- **Reference modes**

A reference mode is a pattern of behavior over time. Reference modes are drawn as graphs over time for key variables, but are not necessarily graphs of observed behavior. Reference modes can refer to past behavior, or future behavior. They can represent what you expect to happen, what you fear will happen and what you hope will happen.

- **Reality Check**

Define some reality check statements about how things must interrelate. These include a basic understanding of what actors are involved and how they interact, along with the consequences of changes in some variables on other variables.

- **Dynamic hypothesis**

A dynamics hypothesis can be stated verbally, as a causal loop diagram, or as a stock and flow diagram. The dynamic hypothesis you generate can be used to determine what will be kept in models, and what will be excluded. Like all hypotheses, dynamic hypotheses are not always right. Refinement and revision is an important part of developing good models.

- **Simulation Model**

A simulation model is the refinement and closure of a set of dynamic hypotheses to an explicit set of mathematical relationships. Simulation models generate behavior through simulation. A simulation model provides a laboratory in which you can experiment to understand how different elements of structure determine behavior.

There are several other modeling techniques like agent based, dynamic system, discrete event which can be chosen to model a complex system. All these techniques vary in terms of abstraction, kind of problems they solve and the way they solve problems. The

difference in these modeling techniques, on the scale of abstraction, is shown in Figure 2.1. The lowest level of abstraction requires detailed information of individual objects and is hence sometimes referred to as physical modeling. On the contrary the highest level of abstraction considers the aggregate values, and individual objects do not have an identity, rather average and global values are considered.

As clearly seen in Figure 2.1 Agent based modeling (ABM) can be done on any level of abstraction and is one of the prominent technique of modeling. However, ABM models a collection of autonomous decision-based modeling entities called agents. Every agent evaluates its situation and makes decisions on the basis of rules [3], thus affecting the overall bahavior of the system. In other words, the overall behavior of the system emerges from the individual behavior of the agents each following its own rules. This modeling techniques has prominent usage when constituent units' activities are to be analyzed rather than the process itself.

Also Discreet Event modeling is used for passive objects, which is clearly contrary to the objects we are dealing in this scope of work.

In contrast to system dynamic modeling, dynamic system has integrated variables which have direct physical meaning like velocity, acceleration, etc., and are not aggregates of any other entities.

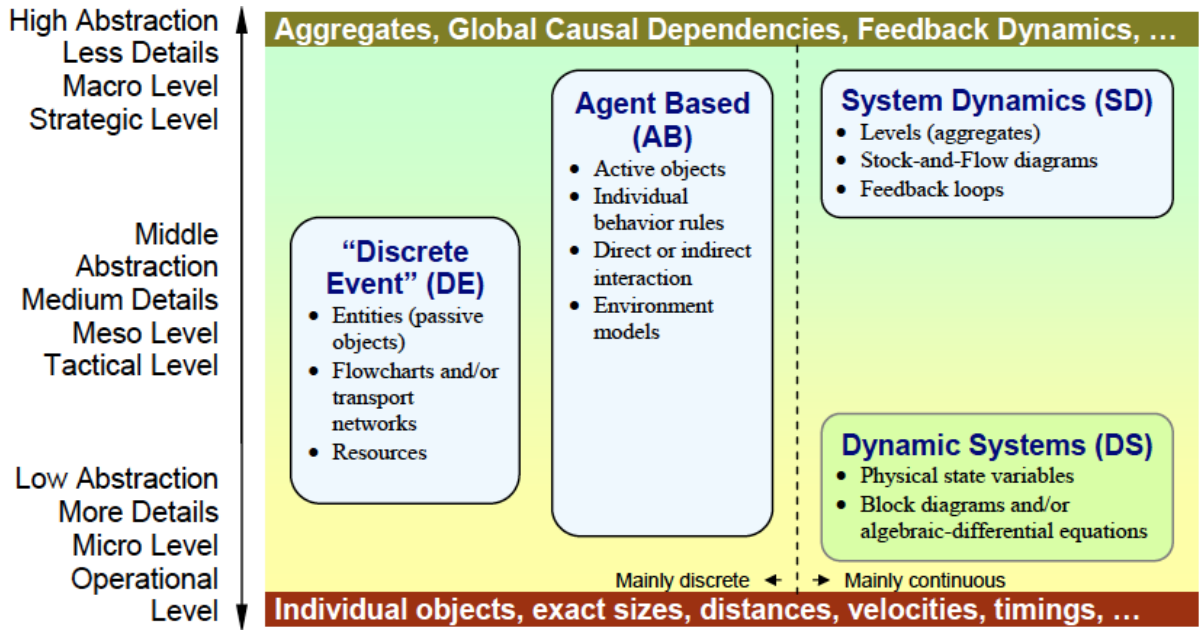


Figure 2.1: Approaches in Modeling on Abstraction Level Scale [10]

Having understood the working of various modeling methods it can be well argued that system dynamics modeling is used to unify, clarify and organize knowledge of complex systems. It is important to have a modeling procedure like system dynamics because a system under consideration of this thesis is large and complex and has interdependent variables in form of key indicators. Owing to the dynamism and the complexity of such a executable system, system dynamics is an appropriate method for modeling. If the

system is well modeled then not only the behavior can be predicted but also the reasons behind the nature of system can be well justified [14]. Also, system dynamic modeling focusses on understanding specific problems and finding solutions to it. It is best suited for problems having feedback, time delays and interdependent relationships [13]. Also as the system is not only affected by stakeholders but also the various factors influencing the nature of stakeholders are also interdependent and interconnected. In addition, the focus is on average behavior and not on the individual agents. At last it can be concluded that owing to the dynamics and dense interrelation of the system properties system dynamics is an appropriate approach to model the system under consideration.

In practice system dynamics is modeled with lot of variations as compared to the theoretical steps mentioned above. So the research efforts started with the modeling process in the following way:

- **Dynamic Hypothesis** This model envisions the long-term introduction (30 years period) of a harmonized Private International Law (PIL) applicable to electronic services in the Internet- in particular with respect to questions of dispute resolution out of a contract with international connection, namely jurisdiction and applicable law. It shall be noted that this model deliberately limits its scope to Business-to-Consumer (B2C) contract relations. This means that the party providing an electronic service is assumed to be a legal entity offering the service in question in relation to its commercial and professional activities. On the other hand, the party buying the electronic service for purposes of self use, the service customer, is assumed to be a natural person that uses the service for private (non-professional) and non-commercial objectives.

- **Identification of Stakeholders**

The second step towards modeling using system dynamics is to identify the stakeholders having influential roles and contributing towards the dynamism and complexity of the system. The various stakeholders in the system under consideration are Service Provider, Service Customer, Lobbyists, Legislature, Court and Lawyer. All these stakeholders have varied interest and are explained in detail in section 2.3.1

- **Causal Loop Diagram**

To illustrate this concept of causal loop diagram consider the word of mouth marketing scenario in Figure 2.2, which aims to increase the adopters of product based on the publicity. The variables in this scope are the adoption rate, potential adopters, and adopters. It can be stated that the potential adopters depend on the adoption rate which in turn depends on the word of mouth publicity. Higher the people adopt the product higher will be the publicity. However, not all the influences are positive in nature. For example the adoption rate can not increase forever because of the market saturation, hence, it is a negative reinforcement.

The causal loop diagram has already been developed and can be referred from appendix A.

- **Key Indicators**

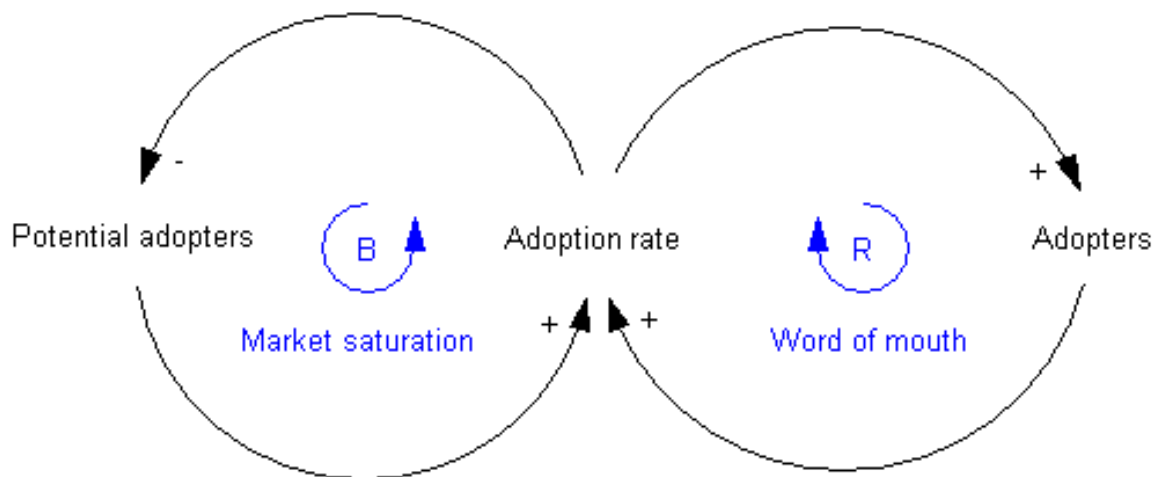


Figure 2.2: Causal Loop Diagram [7]

To understand the pattern of behavior of the system the next task is to identify the variables effecting and influencing the state of the system. These variables are specific to each stakeholder and characterize the preference and nature of the stakeholder. Once these variables are identified change in values over time for these variables should be collected. In the current scenario, these variables would be consumer risk, service provider risk etc. which are covered in detail in sections 4.1.1, 4.1.5 and identification for these were one of the main objectives of the work in hand.

- **Behavioral-over-time graphs** The next step is to identify the nature of values over time. This is done by the concept of stocks and flows. Stocks is the entity whose value change with respect to time, in the example illustrated above potential adopters and adopters are two stock variables. The rate in change in values of these stocks are represented by flows for e.g. new adopters in marketing scenario is a flow. As the new adopter increases by one, the potential and final adopters decreases and increases by one respectively. This step requires a prerequisite of drawing graphs which depict the behavior before the simulation is done. This part of the work recognizes the second objective of the work in hand.
- **Future Steps** The next steps are part of future work and are not within scope, hence are not explained here.

2.3 Existing Modeling Results

The previous research efforts identified the scenario as the long-term introduction (30 years period) of a harmonized Private International Law (PIL) applicable to electronic services in the Internet - in particular with respect to questions of dispute resolution out of a contract with international connection, namely jurisdiction and applicable law, with the scope of Business-to-Consumer (B2C) contract relations.

This scenario also has a considerable effort on some steps of the methodology. Important steps in system dynamic modeling of identification of stakeholders as well as identification of causalities have already been achieved. The following section throws light on the results of these two steps.

2.3.1 Stakeholders

The first step consists in identifying the set of relevant stakeholders. In dispute resolution the set of relevant stakeholders embraces all actors that have a stake - i.e., that are involved - in the resolution of a given dispute. Involvement relates to either being an actor in a dispute brought to court or to terming the legal frame under which an involved court decides whether it has jurisdiction over a case and, if yes, under which state's law a decision shall be found [16].

It shall be noted that this model deliberately limits its scope to B2C contract relations owing to the fact that in the scenario considered consumer bears the maximum risk. This results in a setting that assumes the service consumer to be not only the contracting and paying party (narrow understanding of a service customer), but also the party that uses the service (the same natural person is service customer and service user). Hence, the list of stakeholders are identified as documented in [16]. The following part gives details regarding each stakeholder.

Consumer

This stakeholder can either be defendant or claimant in a dispute out of a service contract and is generally regarded to be contracting party with weaker bargaining power owing to less or no legal counsel and limited financial resources.

Service Provider

This stakeholder can either be defendant or claimant in a dispute out of a service contract, a provider can make a choice of jurisdiction and/ or a choice of law in service contract in question. Service provider generally aim to have as many customers as possible so they are perceived to take consumers from as many markets as possible. As long as there is no harmonized internet-specific PIL, he wants to keep a status quo in which hurdles for consumer to claim are very high. They aim this to keep the transaction cost as low as possible with large number of consumers. Also, they have high legal counsel at disposal as compared to consumer.

Court

When a dispute is brought to court, the court answers two questions. The first being whether the court has jurisdiction over the case based on subject matter or an involved person. The second being under which state's law a decision shall be found if the court has jurisdiction. Courts are assumed to have a strong interest in clear and well accepted rules about jurisdiction and applicable law, to be in favor

of application of well known law (preferably law of their own legal system), and to increase efficiency (short procedures; avoid overload by an overall low number of to be settled disputes with international connection).

Legislature

The legislator is not involved in any specific dispute resolution activity in court. The legislator is the stakeholder that shapes the legal frame that courts as well as the respective contracting parties (including their lawyers) have to be compliant with- in terms of PIL and particularly in terms of jurisdiction and applicable law. A legislator has a clear understanding of the respective connecting factor (or a hierarchy of connecting factors) that shall substantiate jurisdiction or applicable law for a given contractual relationship. Understandings among multiple national or supra-national legislators may differ. One legislator may favor jurisdiction primarily in relation to what a contract party has (e.g., domicile, establishments, infrastructure), another legislator may favor jurisdiction primarily in relation to what a contract party does (e.g., advertisements, accepting international customers).

Lawyer

A person representing the interests of either a service provider or a consumer. Lawyers are assumed to consult and represent service providers in all contract life cycles, while lawyers are assumed to consult and represent consumers only in presence of a specific imminent or ongoing dispute out of a contract. The major challenge for a lawyer is to fully identify the risk factors. However, owing to international relevance, uncertainties are inevitable.

Consumer Lobbyist

A natural person representing the interests of consumers on a policy level by taking influence in agenda setting, legislation preparation (e.g., during consultation period), and legislation enactment on national and supra-national level. Consumer lobbyists are primarily interested in simplified rules and procedures, in giving a consumer whenever possible the right to claim in the state of domicile/ habitual residence, to have any dispute settlement in court held in application of the laws of a consumer's state of domicile/ habitual residence and in the consumer's language. Consumer Lobbyist does not represent all consumers owing to heterogeneous needs but rather an average interest.

Industry Lobbyist

A natural person representing the interests of service providers on a policy level by taking influence in agenda setting, legislation preparation (e.g., during consultation period), and legislation enactment on national and supra-national level. The interests of an industry lobbyist are assumed to be in principle in-line with those of the

respective group of service providers represented. Nonetheless, an industry lobbyist might not represent the interests of all service providers as the group of providers might be heterogeneous with respect to individual opinions towards different questions

2.3.2 Causalities

The second step, already being achieved, is in regard to identifying the causality loop for the system under scope. In the current scenario of private international law, owing to lack of harmonization of law at a globalized level, service consumer is prone to high risk and cost in case of legal dispute. In due course of time if such a harmonization is achieved, among many other advantages, not only will the service consumer be more safe, but also the service provider can have efficient legal counsel owing to more reliable harmonized PIL.

The causality diagram modeling the service consumer oriented scenario invigilates the factors effecting the consumer risk while or before claiming a dispute. It should be noted that all the values in the causality diagram denote the average interest of the stakeholder under consideration.

The consumer evaluates the risk involved with the consideration of dispute value involved. There is a dispute value threshold below which the consumer would not take an action against the service provider and if the value is beyond that the consumer might take an action i.e. either approach the service provider or claim a case in court. Consumer owing to he being a private person would also keep in consideration the estimated transaction cost- cost to file the case, gather information about the laws and the process, lawyer fees etc. - and would also have a threshold for the same. Estimated duration of transaction, and the delay which might happen during the course of such a procedure also adds to consumer risk.

When consumer has a high risk involved it adds to the pressure exerted on the consumer lobbyist to act so that the law can be made consumer oriented. With time delay the PIL convention orientation might change which would effect the way trials are proceeded. The implementation of any changes in any state by and large comprises of three steps. The first step is to make changes in the law depending on the demands and relevance. The step ahead would be to declare the amended law as a convention. The final step is to implement that law in the state. If a convention is not implemented by any state then the convention has no practical relevance. When such a law is in place it will reduce the transaction cost and the trial duration. Also, when harmonization level is intensified the quality of legal counsel, specially for service provider, will increase manifold. Harmonization would reduce the level of uncertainty and help the legal counselor. Whenever, any change in law is made PR campaigns and word of mouth activities help in raising the consumer awareness. A better aware consumer perceives a lower risk in a dispute resolution process.

The PR activity increases the consumer awareness and decreases the estimated duration and the cost for the dispute, thereby mitigating the consumer risk. Depending on the risk involved the consumer can either drop the case, go for an out of court

settlement with the service provider or file a case against the provider in the court directly.

On the other hand, service provider is also bothered about the risk involved, though on a lower scale. He also has the same factors as that of consumer in consideration while evaluating the risk. However, the service provider always has a legal counsel at his easy disposal, thereby alleviating the risk. Owing to the risk involved industry lobbyist experience a pressure from the service provider and in due course of time and would try to bring changes in the law so that it is more provider friendly. Changes are brought in the PIL in the similar fashion as stated earlier. However, in this case, when the consumer awareness increases the consumer would be claiming more for their rights. So the provider would may be reduce the number of contracts he holds for global customers, in order to keep a check on its own risk.

2.3.3 Summary

This chapter has thrown light on the major efforts towards the harmonization of PIL. The fact that the the long term aimed harmonization of PIL is a complex, interconnected and interdependent transition contributed majorly towards the relevance of system dynamics modeling as the chosen modeling method for the current research work. This relevance as well the steps of system dynamics modeling were explained thus giving insight into the already achieved steps and the next steps which determine the scope of the current work in hand. Therefore, the next chapter depicts the research methodology of the next steps namely the identification of key indicators and their corresponding behavior over time graphs.

Chapter 3

Research Method

This chapter focuses on methodological aspects relevant to this thesis. The methodology is influenced by the objectives identified for the work in hand, namely selection and specification of key indicators, identification of comparable cases and acquisition of empirics and behavior-over-time graphs for all identified key indicators. Consequently, the methodology determined covers the designing and implementing of the instruments (Survey and Interviews) for the collection of empirics, analysis of data for the identification of key indicators and behavior-over-time graphs.

The methodology selection is based on two factors. On one hand, the already mentioned objectives are to be achieved which have to be based on the expert knowledge (to be retrieved from empirics obtained) and on the causal loop diagram (a result of previous research efforts). On the other hand, the methodology is shaped by a number of key challenges identified. It is also very important to note that the modeling scenario as identified by previous research envisages a time frame of 30 years which adds to the factors to be considered while defining the methodology. Keeping the constraints in consideration and the objectives to be achieved it is very important and at the same time very challenging to achieve a suitable research methodology. The method devised must not only be feasible but also lead to add to the knowledge which would help to achieve the aimed objectives.

Accordingly, a suitable approach has been developed for achieving the objectives and is explained in the ensuing sections. This is followed by an explanation of first iteration of key indicators, an introduction to the methodology of identification of actors, instrument design and implementation for the empirics collection. The next section covers the interpretation methodology for the expert knowledge which consequently forms the basis for the behavior-over-time graphs.

3.1 Key Challenges

This thesis aims at identifying a set of key indicators which are perceived as variables that the respective stakeholder has prime interest in, when considering the modeled transformation towards a harmonized PIL. Once these are identified a so-called behavior-over time graph has to be drawn. The graph uses a time unit- embracing

the complete modeling horizon of 30 years- for its x-axis and the respective applicable unit for the indicator in question for its y-axis. the graph visualizes how an indicator is assumed to change value for the full modeling period. The behavioral information can only reflect assumptions, since the modeled transformation is not within the scope of the thesis and has not happened yet. And it is exactly in taking these assumptions based on the feedback from the stakeholders in the right way, that the work in hand sees its main challenges.

Each step oriented towards the objectives can be characterized with an unique challenge of its own. However, the challenges can be broadly categorized as shown in the Figure 3.1. These challenges are explained in detail along with the methodology for each step in the next section, as they play a major role in defining the approach taken to achieve the goals.

3.2 Goal Driven Step-specific Methodology

As mentioned before the objectives of the the work in hand are the identification of stakeholder specific key indicators and their behavior over time. However, owing to the complexity and challenges it was essential to achieve them through a multi step process. Therefore the steps for the objective of Identification of key indicators is shown in Figure 3.2 and explained in sections from 3.2.1 to 3.2.5. As shown the starting point of the work forms its basis through the causal loop diagram and the list and description of stakeholders involved in the the process being modeled.

3.2.1 Key Indicator Identification(Iteration 1)

As the first step it is crucial to identify an initial list of most important factors which would denote the preference and behavior of each stakeholder in the scenario under consideration. When a service provider and service consumer, in an international context, get involved in a business and sign a contract all the stakeholders are effected by different factors. However, there are some key indicators amongst the humongous list of factors which the stakeholders prioritize over others. The identification of such key indicators is important not only to know the interest of stakeholders but also to support the scalability of the underlying model of system dynamics. To identify such critical key indicators it is important to study the current chaotic condition of dispute resolution process in business to consumer contract having international connection which is primarily due to the lack of harmonization of law. As mentioned at different times, it is important to understand that in current scenario the consumer bears all the risk and the main goal of the harmonization would be to reduce the risk from the shoulders of the weaker party. However, speaking from the perspective of different stakeholders the need and impact of harmonization would be different. This is done based on the causal loop diagram which portrays how and by which factors the stakeholders are effected and also on the description of stakeholders. They provide a strong basis for initial assumptions for identifying the initial list of key indicators. Also publications like [11, 17, 8] give an insight into the whole dispute resolution process and the impact

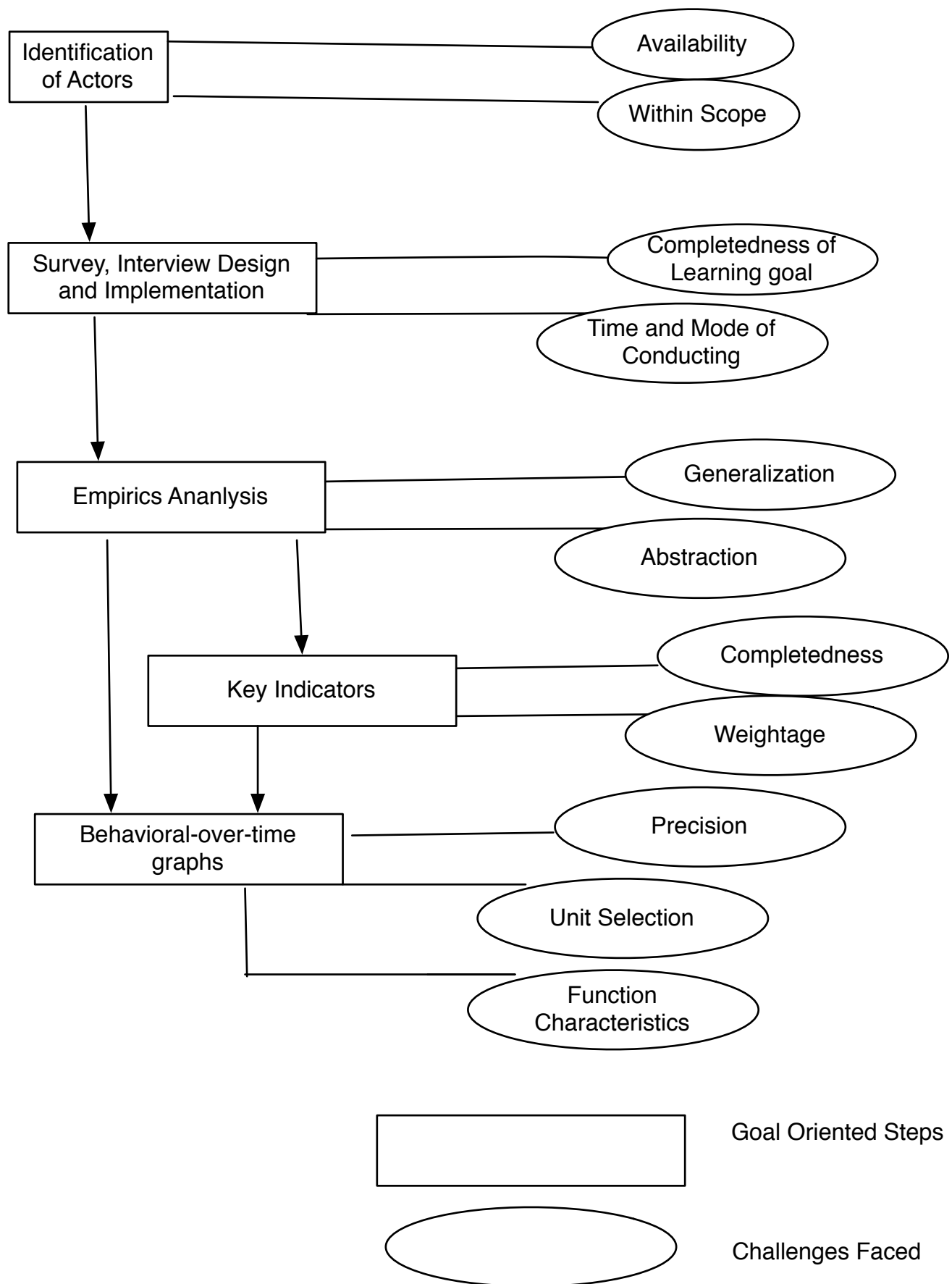


Figure 3.1: The Main Steps and Associated Challenges

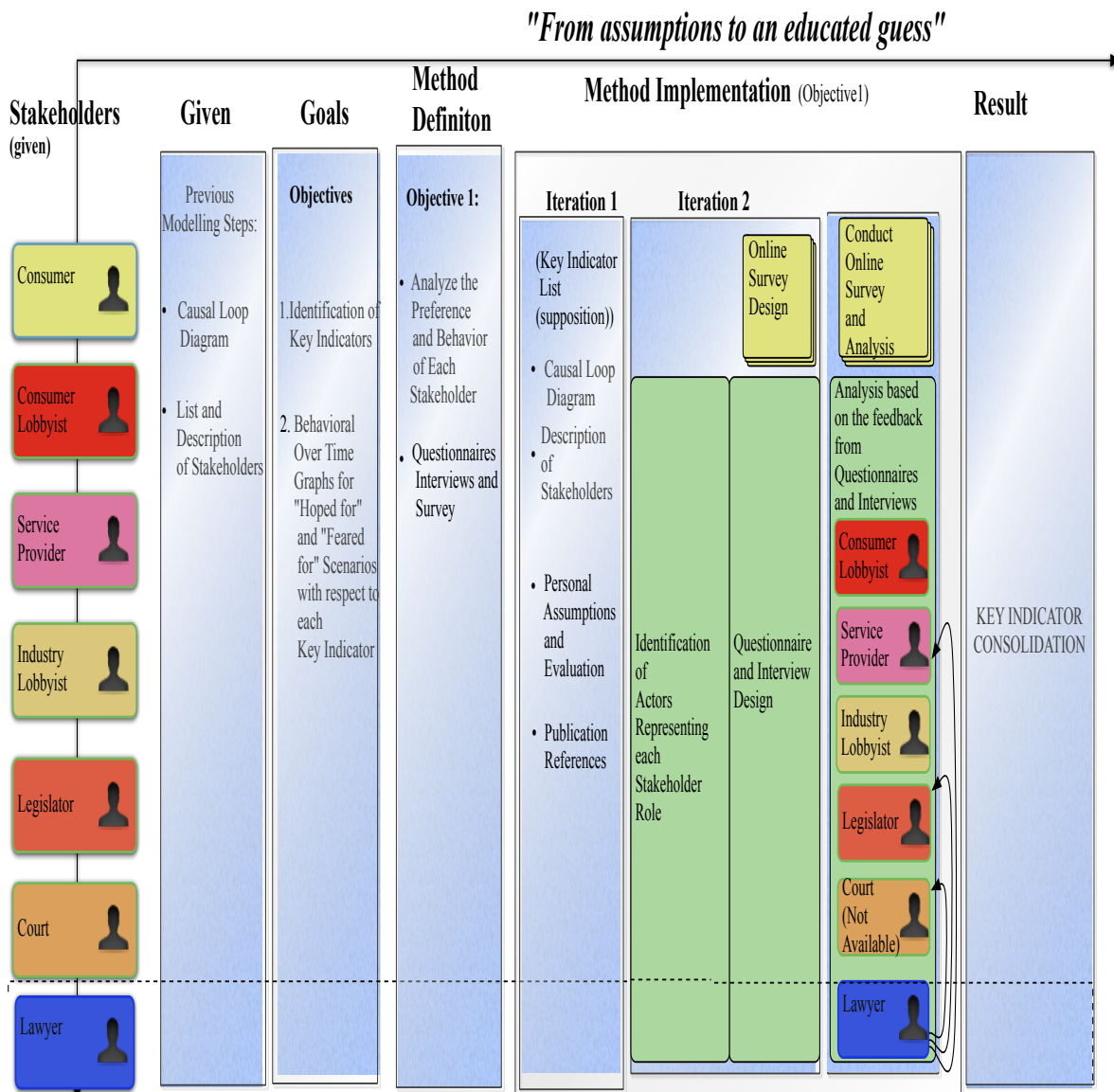


Figure 3.2: Methodology for Identification of Key Indicators for Each Stakeholder

such a fast track procedure of harmonized PIL would have on each stakeholder. It was important not only to understand the behavior of each stakeholder but also to identify the problems each stakeholder face in the dispute resolution process in the cross-border transactions. Hence, based on these understandings and logical assumptions an initial list of key indicators is made.

3.2.2 Identification of Actors representing Stakeholders

Based on the list of stakeholders namely Consumers, Service Provider, Consumer Lobbyist, Industrial Lobbyist, Legislator, Court relevant people/organizations are supposed to be contacted so that the reasoning for future goals can be based on empirics collected. The major challenge for this step is identifying actors who on one hand have knowledge and experience in the specific scenario under consideration and on the other hand have the willingness to contribute to the research and are available. By looking at the profile of various organizations which fall into the category of any of the stakeholders their knowledge and experience with respect to scenario is analyzed. European organizations are contacted owing to greater chances of they being interested in giving their time and knowledge. Owing to the time constraint and availability of the organization at European level the aim is to have a data that could be qualitatively analyzed. However, for the consumers which are one of the stakeholders it is possible to reach a wider audience. Student community is mainly targeted owing to the easy accessibility as well as because they would have experience in using online services. The identified actors are approached either via electronic mode or via telephone to confirm their willingness to participate in the study.

3.2.3 Survey, Interview Design and Implementation

The next crucial step is to design a survey and interviews for stakeholders. The instrument selection is stakeholder specific. Owing to larger audience of consumer, online survey is chosen as the instrument of retrieving the empirics. While for other stakeholders, interviews are the mode of collecting the expert knowledge. Design of survey and interview is driven by the goal of retrieving the expert knowledge of each stakeholder and understanding their behavior and preferences within the scenario of cross border transaction and the dispute arising eventually. It is also important to get an insight into the factors which the stakeholders themselves would like to change and what they believe and/or foresee would eventually change with the applicability of harmonization of PIL. This acts as additional learning goal from surveys and interviews. Keeping these learning goals, therefore in mind, the survey and the interviews are designed.

As mentioned before for the consumers online survey is conducted, this is aimed for masses, majorly covering the students of department of Computer Science and Law from University of Zurich. This selection of audience might lead to biased results, however, these are the very audience which fall into the category of people who would use the services most often and/or would have legal insight into. For the rest

of stakeholders interviews, either face to face or telephonic, is the chosen instrument for data collection with the organizations identified as the relevant actors. The main challenges are that the survey and interview should cover all the learning goals and within the time limit. While framing the interview design and online survey the questions are placed in reference to learning goal. This solves two challenges, first anything which falls outside the arena of learning goal is not included and saves the time of the participants also.

The instrument of online-survey gives flexibility to reach a wider audience and since it is an anonymous survey it offers an unabashed opinion because people voiced their opinion without the hesitation of being judged or questioned. The survey as shown in figure 3.3 has varied sequence flow depending on what the participant answers. Each question has a specific learning goal in mind and has the expectation of producing data that could be interpreted for understanding the consumer behavior. It is also important to mention here that the scope and the scenario, as mentioned in starting of this chapter, is extended for the consumer survey. The consumers are even allowed to answer with respect to any goods that they might have purchased from a foreign provider and/or any purchase of service or goods from a national provider owing to the inherent complexities of cross border transactions and risk orientation respectively. For example, the question marked 1 in Figure 3.3 aims to reconfirm and understand the result of the study [9] which mentions that the time for which a consumer had a relation with a service/good provider considerably effects the way consumer take actions when he is having a problem with good/service. Also, owing to the fact that the consumer is the weaker party with least awareness and maximum risk it can be logically concluded that the consumer would take various steps for e.g. starting from taking help from friend/colleague to approaching legal counselor in order to resolve a dispute/problem with a service provider. To gain an insight into this behavior of the consumer it is important to iterate over some questions as done in steps 2.a, 2.b, 2.c, as shown in the online survey survey 3.3. Also as shown the options given in each subsequent question varies in degree of severity and efforts involved from the consumer, the sole reason behind this is to confirm the initial assumption that the consumer would prefer to solve the dispute with least cost, time and efforts. As the consumer bears the majority of the risk it is important to understand how much he is aware and satisfied with the legal system and rights provided hence it is also posed as a question marked as 3 in the Figure 3.3. As the major goal is to understand the preferences it is important to ask which factors are important during the entire process of dispute resolution process so that not only the initial assumptions regarding the factors affecting the consumer could be confirmed but also new insight could be retrieved. This is achieved with the step marked with 4. The design of interview questions has two main goals: The first one is to ask each actor what are the factors which, in the scenario under scope, effects them the most. The second is to find how they see these factors changing with the time, once the short track procedure of harmonized PIL is in place.

The interviews were conducted based on a pre designed stakeholder-specific questionnaire. The questionnaires as mentioned before were driven with the goal of learning and understanding the behavior and preferences of rest of the stakeholders. However, as the interviews were in person or via telephone they were rather dynamic

and discussion oriented in the nature. This is due to the fact that the actors had lot of important insight to share and hence it was important to understand even these things in depth.

3.2.4 Empirics Analysis

Once the data is retrieved, transcripts are made out of the initial noting and/or recordings. Refer to appendix D. Next, the raw data is analyzed to retrieve relevant information. The main challenges is to get a complete picture of the entire process of dispute resolution and reach to a as far as possible generalized conclusion. Another more problem is that of abstraction as the data comprised of all factors by which a stakeholder is effected or has a interest in. But owing to the underlying system dynamic driven model it is important to analyze the data in such a way that the most important features can be extracted.

As regards the consumer survey, as there are more people taking part in the survey, it is important to divide the information into categories as two persons might use different words to convey the same information. Also, as a researcher the interpretation could be very specific and can not be generalized. So answers from the questions where the users are supposed to answer subjectively are put into categories, each denoting the meaning associated with answers which fall into that category. Also, there are some views which are unanimously shared or are evident across multiple interviews. Such views were taken at higher level of validity hence helping in evaluating the most important key indicators for the consumer.

For the rest of the stakeholders also qualitative analysis is done mainly owing to less number of participants from whom data is gathered. Some views are shared amongst all the interviewees(even among different stakeholders), hence establishing it as a fact. For example, consumer bears the majority of the risk in the dispute resolution process is unanimous opinion amongst the survey participants. On the other hand there are some thoughts such as “These days the service provider bears more risk, as consumer has the right to fight in his own country” which lent contradiction in between the actors representing same stakeholder. In such a scenario either the view majority of the people support is taken or one opinion is logically favored and chosen. Hence making the validity to the level of educated guess.

3.2.5 Key Indicator Identification(Iteration 2)

The final selection of key indicators, which is one of the major contribution of the thesis at hand, is based on the analysis of the data retrieved in the empirics collection step. The major challenge as shown in Figure 3.1 during this step is not only to come with a complete picture of stakeholder’s mindset but also weigh the different factors appropriately so that the most important and reasonable number of key indicators could be identified.

So, the initial list of the key indicators has to be once again studied in view of the knowledge gained from the interviews and surveys. Every key indicator is reasoned

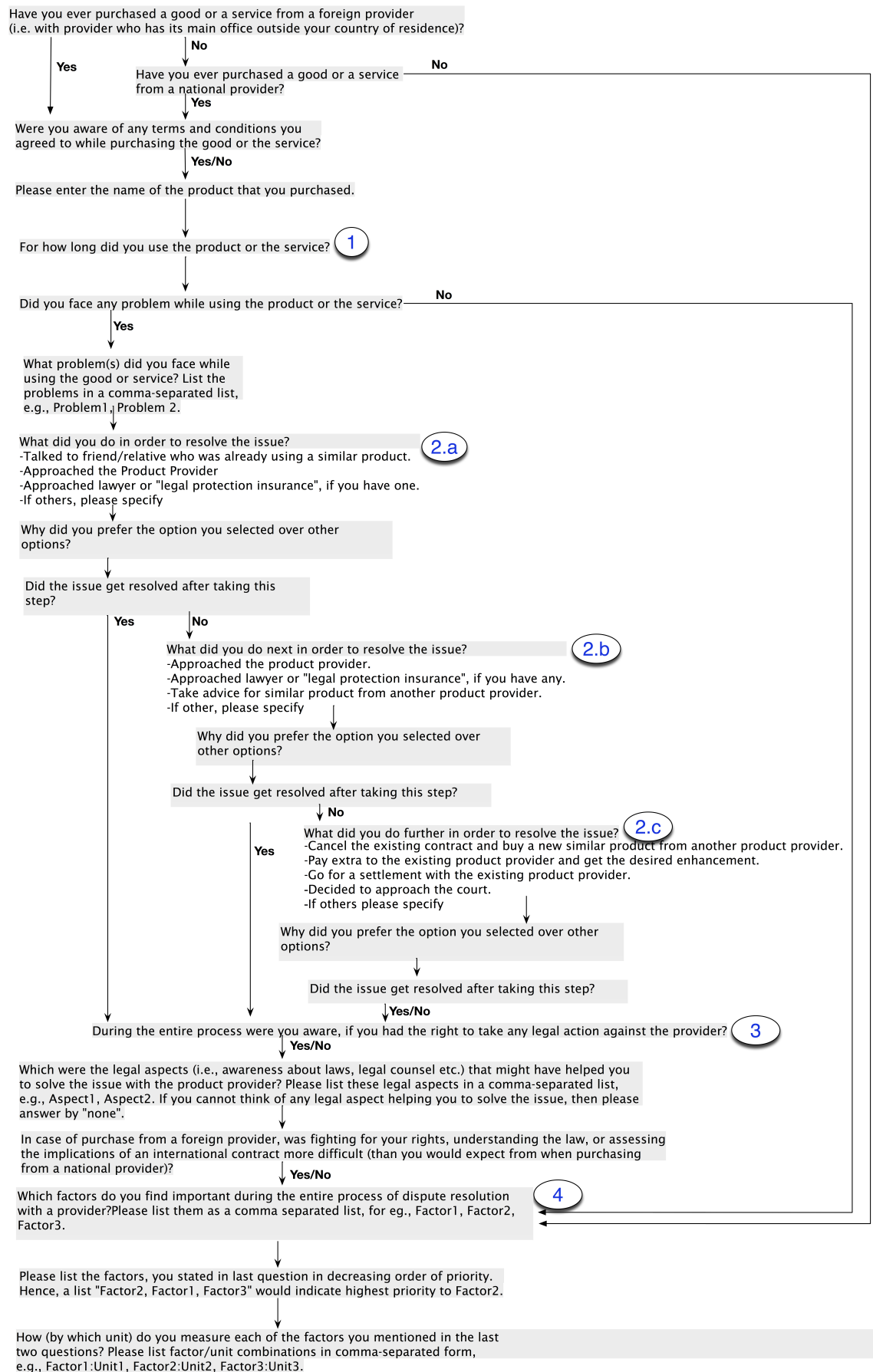


Figure 3.3: Flow and Questions for Online survey for Consumer, one of the Stakeholder

and is either rejected or selected as the final key indicator based on the interpretations from the data collected. The reasoning is either grounded on the direct data collected or on the logically deducible interpretations obtained from the analysis of data. The analysis of data helped to reach to a conclusion with respect to the most important factors for each stakeholder.

3.2.6 Behavioral-over-time graphs

The last major contribution for the work in hand comprises of identifying the behavior-over-time-graphs for the identified key indicators per stakeholder. First of all unit for each key indicator has to be identified so that key indicator could be measured and behavior can be depicted. Secondly, as the x axis is supposed to have time as the unit, important events which would have impact on the behavior of the indicator has to be identified. However, the most crucial decision is with respect to the representation of the behavior of the key indicators with respect to time. For example, the behavior can also be a step wise function or a continuous function. All the factors, just mentioned, are logically deduced based on the feedback from the stakeholders and logical assumptions. Hence the following section throws light on the methodology for the decision for these three factors.

– Unit for Each Key Indicator

The unit not only denotes how a particular key indicator is measured but it also gives an additional meaning to the indicator. For example, if the risk of the consumer is measured in terms of money then it implicitly conveys that the cost involved denotes the gravity of the risk for the consumer and the risk is measured in terms of, say, Euros. Also for those key indicators whose behavior is a result of an aggregate function it is very important to have a unit which conveys the meaning of aggregate function completely. All of these requirements act as challenges in deciding the unit for each key indicator. Feedback from the stakeholders forms the basis behind the selection of a key indicator. For example, in case of service provider risk, the feedback shown in appendix D.1 conveyed that the service providers risk is effected by various factors however all of them could be interpreted as cost. So when such direct feedbacks are available the unit of the key indicator is decided based on the expert knowledge. However, for cases when such direct feedback is not available the unit is decided on the basis of its capability in conveying the meaning of the key indicator. For example, PIL convention orientation and material law orientation denotes the orientation of the law towards the service provider or the consumer. For such indicator a step wise function having the range of $[-1,1]$ and each step would denote how the law is biased toward one party or the other.

– Time events on X Axis

It is important to identify milestones on the x axis to depict the behavior of the key indicators. As the modeling period is predetermined to be 30 years, so within this span important events with respect to the scenario under consideration are to be determined. The first milestone at time stamp of 10 years,

marks the applicability of harmonized PIL at least regionally i.e. within Europe, was predetermined as a part of previous research efforts. The rest of the milestones were identified based on the relevance and impact they have in connection to the key indicator and the overall system. For example, PR activities make a substantial difference on the consumer awareness which in turn effect consumer's risk perception. The change of consumer risk has an impact on the service provider's risk. Hence, events which contribute and effect the key indicators to a substantial level are marked on the x axis.

– **Behavioral Function**

To predict the behavior of the key indicator for “hoped for” and “feared for” scenarios comes with lot of challenges. If the behavior will be depicted as a continuous function than the slope of the graph also has to be reasoned and logically deduced. Also the value of y axis has to be quantitatively explained. For example, if it is a continuous graph for the consumer risk, then why the cost 600 Euro denotes a certain level of risk at say after 10 years and why not 602 Euros. To avoid such questions, which are difficult to answer and predict for a time span of 30 years, behavior is predicted in terms of trends. Such trends indicate the increase, decrease or constant value of certain indicator for a time span.

Chapter 4

Results and Discussion

Driven by the objectives and the methodologies determined for the thesis this chapter covers the results in detail. This chapter documents the major contribution of the work in hand, namely the consolidated list of key indicators for all the stakeholders and behavioral-over-time graphs for each key indicator. Along with presenting the result this chapter also discusses the relevance and reasoning of the achieved objectives. As seen in the last chapter it was a multi-step process to finally achieve the two objectives. Hence this chapter also throws light on each step that lead to the fulfillment of the goals for the work in hand.

As mentioned this thesis is embedded in the whole research of the CSG department which aims at the modeling of transformation to harmonization of PIL. The following results form the basis on which the future work of the research would be based on. It should be noted that the results are achieved on the basis of the empirics collected from the instruments of data collections and on personal logical, scientific assumptions and interpretations. Hence the results are mentioned in the following sections.

4.1 Key Indicator Identification

4.1.1 Key Indicator Identification (Iteration 1)

This following section defines the assumed initial list of key indicators and the reason for their relevance for each stakeholder, based on the personal assumptions and interpretations.

Key Indicators for Consumer

– Consumer Risk

Consumers are private persons and have little or no legal counsel at their disposal. Owing to this the consumer is considered as the party with lesser bargaining powers as compared to the service provider. The possibility of dispute resolution in a state outside of his domicile, in a foreign language makes

the consumer vulnerable. The consumer is also afraid of the lack of knowledge about the entire legal process. Additionally, the level of involvement and the efforts required from the consumer for the entire process adds on to the consumer risk. Due to the above mentioned factors it is very important for a service consumer to be aware of the risk involved.

Furthermore, the total duration involved for the entire process of dispute resolution i.e. starting from the point when the consumer decided to fight for his rights till the point wherein the dispute is settled also adds to the consumer risk. If the duration is unknown or long it would increase uncertainties, efforts and ongoing involvement from the side of the consumer.

Additionally, private person does not have substantial money at their disposal. Consumer with a precondition of limited money in hand focusses on a correlation between the transaction cost and the dispute value. If the transaction cost is too high, the way consumers react might change, in other words, consumer would then consider dropping the case or settling outside court even if he is devoid of his rights. Hence, consumer has high degree of dependency on this variable while deciding an appropriate plan of action.

Once harmonization of PIL is in place uncertainties will reduce thereby having a positive impact on the consumer risk. Also the efforts and the involvement required will partially reduce hence influencing his risk. As then the consumer would not be bothered about the law and the language or the state in which the case is fought.

– Consumer Awareness

Consumer in the current scenario is in the world of uncertainties and unknowns. First of all he is not fully aware of his rights, he does not have legal counsel and additionally have least idea about the process of dispute resolution. Even for evaluating the risk involved for fighting for his rights he does not know which factors influence his wish of keeping his risk to bare minimum and also achieving the success at the same time. This factor of awareness is vital because if the consumer is aware of the process and can foresee the efforts and cost involved he would take a better informed decision while deciding for how to fight for his rights.

Once the harmonization of PIL is in place the law and jurisdiction for him would be easier but he should be aware about the existence and vitality of such a fast track procedure.

Key Indicators for Service Provider

– Service Provider Risk

Service provider is apprehensive about the risk involved as he cannot afford to fight dispute above a threshold owing to the reputation at stake. Also, the increasing awareness of the consumer makes the risk evaluation a critical factor for the service provider as a more informed consumer can press harder for his own rights. If the risk involved is known it would lead to a better action plan

for the provider not only in terms of how he proceeds with a case of dispute but also with respect to expansion of business.

Once the harmonization of PIL is in place the providers risk will tend to come at par with that of consumer risk as now even the consumer would have clarity of laws and its proceedings.

– **Rate of service provider initiated dispute settled outside the court**

The service provider has large number of consumers, he wants to portray a strong position to the consumers so that he does not have to agree to all the demands or higher pressure from the consumers. Also if the cases are settled outside court it would keep the transaction cost and efforts involved from the side of service provider to bare minimum. The service provider craves for a bigger market and for that he strives for a good reputation, if the cases are filed in the court at a higher rate it would effect the reputation.

– **Market limit**

The service provider is interested in keeping the hurdles for the consumer as high as possible by keeping a limit on the number of contracts he adds to the consumer's risk. Also, this would reduce the risk of the service provider as the the consumer would be afraid of loosing the contract and think before filing a case against the service provider. However, owing to his own motive of expanding the business and supporting the e-business a low number of contracts would definitely deteriorate the progress of increasing the market share.

Once the harmonization of PIL is in place in order to add on to the consumers' risk, if he reduces the number of contracts, his wish of expanding the business does not get fulfilled. However, the service provider would prefer not to keep a limit on the number of contracts and expand his business on a higher rate however if the the disputes are more he would keep a limit on the market expansion.

Key indicators for Consumer Lobbyist

– **Consumer Lobbyist Pressure to Change**

Consumer lobbyists are primarily interested in simplified rules and procedures, in giving the consumer, whenever possible, the right to claim in the state of domicile/ habitual residence, to have any dispute settlement in court held in application of the laws of a consumer's state of domicile/ habitual residence and in the consumer's language. In addition, consumer lobbyists are interested in fostering awareness about consumer rights among consumers themselves. This key indicator is the prime factor which depending on the intensity of consumer risk effects how the consumer lobbyist take action towards a more simplified and consumer oriented law.

After the harmonization of PIL comes into force the pressure on the consumer lobbyist will decrease provided that the orientation of law is towards the consumer.

– **Consumer lobbyist’s decision to lobby for procedural or material law**

It is very crucial for consumer lobbyist to decide which law they would like to bring change into owing to the different difficulty level. If the goal of the consumer lobbyist, for example, is to increase the number of cases filed in the court they would try to change the procedural law. However, if they aim to change the percentage of cases settled in favor of the consumer change in the material law would be aimed. Such a decision is important as it would decide the process they need to adopt, required efforts and time.

After the harmonization of PIL is in force the reason to bring changes in the procedural laws are relatively reduced as the harmonization would take away the risk from the consumer’s side.

Key indicators for Industrial Lobbyist

– **Service Provider Pressure to Change**

Service Provider lobbyists are interested in defending the current strong position of service providers in dictating jurisdiction/applicable law provisions in concluded contracts, since by that hurdles for consumers are kept high, which leads to a presumably low numbers of cases brought to court by the consumer. The lobbyist are interested in safeguarding the interest of the parties they represent. Whenever any abuse is reported or if they feel that the parties they represent are not protected enough, they strive to take appropriate actions. This factor is very important as the lobbyist has one sole motive of protecting the parties they represent and if the risk of service provider is very high the pressure on lobbyist would also be high.

After the harmonization of PIL is in force the reason to bring changes in the procedural laws are relatively increased as the harmonization would take increase the risk at the service provider’s side.

– **Service provider lobbyist’s decision to lobby for procedural or material law**

It is very crucial for provider lobbyist to decide which law they would like to bring change into owing to the different different difficulty level. If the goal of the provider lobbyist, for example, is to increase the number of case filed in the court they would try to change the procedural law. However, if they aim to change the percentage of cases settled in favor of the provider change in the material law would be aimed. Such a decision is important as it would decide the process they need to adopt and tell how much efforts and time is required.

After the harmonization of PIL is in force the reason to bring changes in the procedural laws would increase as the harmonization would increase the risk from the service provider’s side.

Key indicators for Court**– Claims filed in Court**

Courts are interested to enhance their capability and efficiency towards resolving a dispute. If there are substantial number of cases submitted in a court they not only have more experience(in case when team changes over the years) for solving the case but also they have more references with which the earlier cases with foreign connection were resolved. The number of cases filed in the court also shows their credibility among the service provider and the service consumer.

Also, the court would have a threshold on the number of cases it is able to hear per month for example. The court is interested in lower duration of the trial. The shorter the cases are, more frequently the court can handle other cases. In other words, the number of pending cases would substantially reduce hence increasing the number of cases filed in the court.

Once the harmonization is in place the efficiency and capability would be effected thereby increasing the number of cases filed in the court.

Key Indicators for Legislature**– PIL convention orientation and material law orientation**

The factor is very important for the legislature as it is the body which is neutral and aims towards lower complexity of law. On one hand the legislature would try and protect the weaker party involved in the dispute, protect their rights, reduce the consumer risk, but on the other hand it would also help the intention of service provider to foster the e-business and protect the service provider from long arm jurisdiction. All these factors hold true for both material and procedural law.

– PR

As legislature is interested in increasing the awareness of the consumer this factor becomes very important as the cost involved also plays a vital role in identifying the instrument and scope for the PR campaign. The PR campaign aims to provide the consumer with a transparent access to the mechanism of law and jurisdiction process(complex in the scenario), thereby influencing the way consumers plan their action of fighting for their rights. However, legislature would have a threshold beyond which it cannot invest in such campaigns.

Furthermore, once the harmonization of law is implemented the way PR campaign is held and the cost involved would also be effected as the laws would be more uniform and certain thereby making the campaign process easy and cost effective.

4.1.2 Identification of Actors representing Stakeholders

As a result of contacting around 40 organizations representing different stakeholders within the scope, the details of which can be found in appendix B, following stakeholders as mentioned in Table 4.1 agreed to contribute in the empirics collection step of this work. The mentioned actors had rich bank of information and high experience thereby providing sufficient empirics. For the consumers a wider audience was targeted hence around 3000 students were reached. However, only 100 responses were received. One of the additional actor namely lawyer as shown in Figure 3.2 is introduced owing to the fact that the courts refused to take part in the study. The regret letter can be referred from the appendix C. This is done to get an indirect opinion about the proceedings and preferences of the court. However as lawyers represent the service provider, in case of a dispute in the court, they could also give opinion on the preferences of the service provider.

Table 4.1: List of Actors Representing Stakeholders

| Stakeholder | Organization |
|--------------------------|---|
| Service Provider | Data Trans, Zurich Webkeeper, Volketswil |
| Consumer Lobbyist | Verbraucherzentrale Bundesverband |
| Industrial Lobbyist | Euro Chambers, Belgium BDI - Bundesverband der Deutschen Industrie e.V. |
| Legislature | European Union Council, Belgium European Commission, Belgium |
| Lawyer(in lieu of Court) | Mr. Ernst Schmid(Niederer Kraft and Frey, Zurich) Mr. Christain Oetiker(Vischer AG, Zurich) Mr. Hochstrasser(Baer and Karrer, Zurich) |
| Consumer | Students from Department of Informatik and Law from University of Zurich |

4.1.3 Survey, Interview Design and Implementation

Once the actors were identified the survey and the interviews are conducted based on the designed survey shown in 3.3 and pre decided interview script or questionnaires. The survey is conducted with help of a tool for online surveys which let the user access the questionnaire without disclosing their identity. For the rest of the stakeholders mentioned in the Table 4.1 interviews are conducted. The interviews gives an opportunity to understand the expert knowledge in greater depth. For example, to understand the effect of Harmonization of PIL with respect to the stakeholders. Such learning goals are highly subjective and also the implementation is not feasible in immediate future (also mentioned by one of the interviewee) which led to greater difficulty for foreseeing the impact of harmonization. However, the discussion during the interviews not only gives an insight into the important criterion for each stakeholder in such a process but also throws light on the ever increasing need for harmonization. Some interviews went for 60 minutes and others were for around 20-30 minutes depending on how much time the interviewee had how much data they could share without their privacy being hampered.

The most important questions which are asked with respect to the scenario during the interviews with the stakeholders are shown in the Figure 4.1. These questions gives an insight into not only what are the factors which effect the stakeholders the most but also how they foresee these factors changing with time once the harmonization of PIL is achieved.

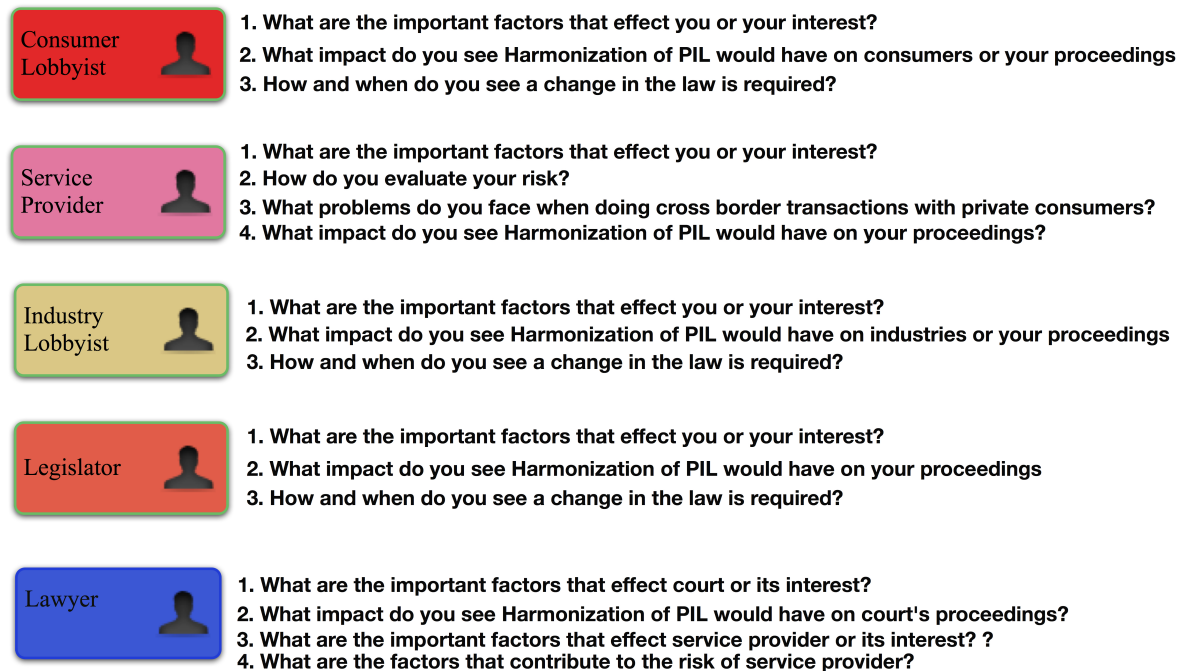


Figure 4.1: Questions asked during interviews with Stakeholders

4.1.4 Empirics Analysis

The analysis of the data gives important conclusions and insights into the various aspects of cross border transactions, consumer rights, consumer's risk, dispute resolution process, service provider's risk, legislature's role to keep a balance between consumer protection and support to e-commerce across the borders, lobbyist role to support the parties they represent etc.

As mentioned in previous chapter categorization is done of the data retrieved from online survey. That means terms having relations are put into one category to identify the key variables by which consumer is effected. As shown in the Figure 4.2 the categorization of data shows that the consumer is primarily bothered about the cost, time and the intricacies of legal process. The consumer realizes that he is the weaker party and is not only unaware of the legal process and its implications but also has least resources at his disposal to sought out a dispute in a favorable manner. Also, while categorizing the data some terms used by the participants could have had 2 different meaning. For example, the word "Professional Assistance" can be interpreted as legal counsel or to the technical assistance provided by the company. The words "Do not want to travel abroad to fight the case" is interpreted as

additional cost and time investment and as a result is categorized into the category of cost and time while analyzing the data. Also as established consumer is a stakeholder which has the highest risk but also is unaware of his legal rights or alternatives. For example out of 100 responses only 1 mentioned the Alternative Dispute Resolution (ADR) process which is available for short claim value disputes. This shows that even when the consumers have been given a right they are unaware to use it at the right time, specially in the cases when the service provider is unwilling to negotiate or acknowledge the problem. One more learning from the data is that once the consumer has a long term relation with a service provider they would also not prefer to take drastic measures owing to the good connection with the provider. In such a case the provider would try to give a minor compensation in case of any problem and protect himself from going to the court. As the consumer has no legal counsel at hand therefore neither he has the know-how of the legal process, language. Also he does not have the money to go to a foreign court. 80% of the people who took the survey were from Europe and all of them mentioned the problem that they would not like to go to a foreign court. However, owing to the applicability of Brussels convention consumers have the right to claim the dispute in his own country. This proved that the consumers also face problem because of the unawareness of their rights and legal aid given to them.

The following paragraphs mention the major learnings from the interviews and are also summarized in the Figure 4.3.

Service provider on the other hand is the stronger party, has legal counsel at hand and has larger resources at disposal in the case of a dispute. However, as retrieved from the interviews the service provider is also weary about his risk. He takes all measures so that the consumer has least options to claim a dispute. The provider tries to make sure that he has minimum liabilities in case of a claim from a consumer. However, owing to the consumer protection laws the provider can not reduce his risk below a minimum threshold. Also, the service provider owing to the small dispute value would never go to the court. The service providers take all the measures in the standard terms and conditions so that there would be hardly any service provider initiated disputes which would go to the court. The service provider is also interested in extending the scope of the business but if the cross-border transactions would lead to additional disputes the service provider would then try to limit the scope. Also, as seen in the study performed by European Council [12] 62% of the service providers who took part in the study said that the proceedings in a foreign language and in the same study 73% mentioned unfamiliarity of foreign legal system, have a great impact on our strategy to handle the dispute. This shows that even the service provider is effected considerably with foreign legal system and language being applicable in case of a dispute.

Lobbyist group, whether it is the the consumer lobbyist or the industrial lobbyist try to protect the the group they represent. Both of them work on the basis of reports of abuse of clauses of law. For example, the industrial lobbyist would try to make sure that the cross border transaction is not hampered because of any clause of law in the country in which the service has to be used. On the other hand, the consumer lobbyist would try to make sure that there are consumer protection rights to safeguard the interest of the consumers in case of any dispute. Once the

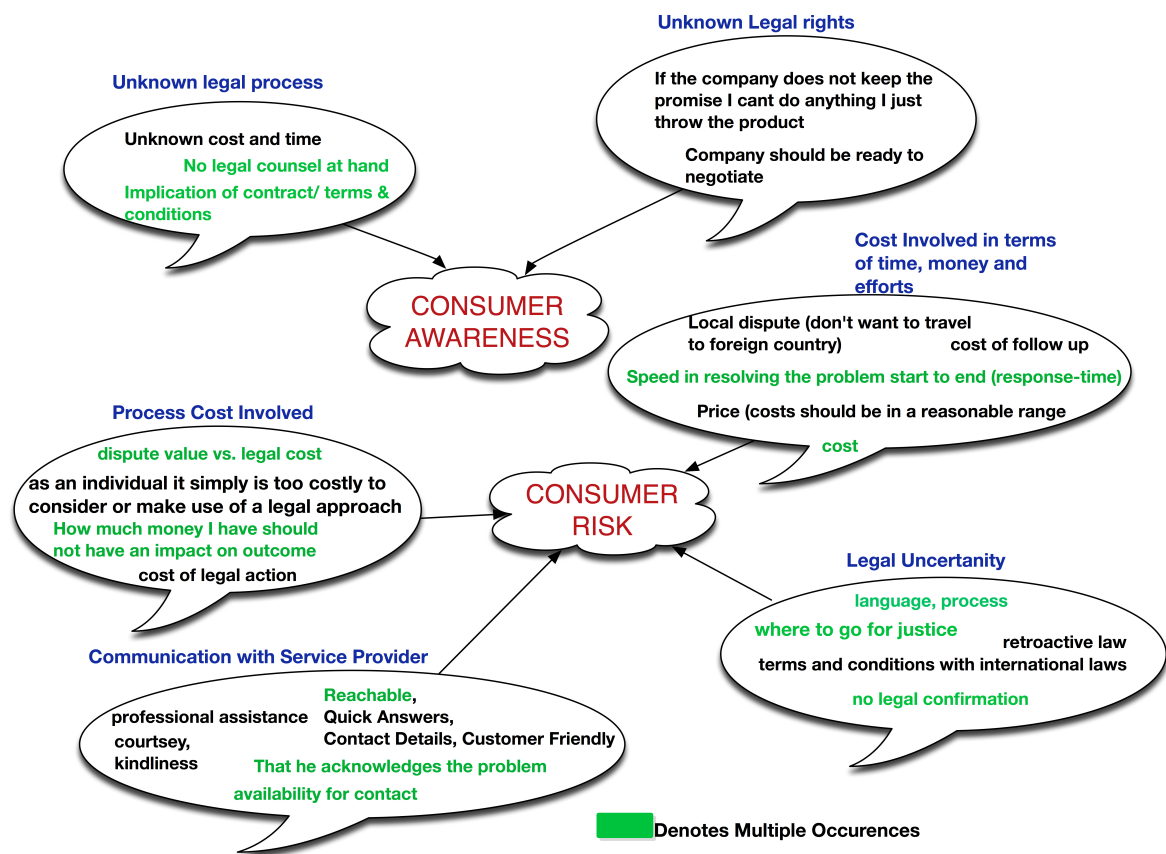


Figure 4.2: Logical Categorization of Data Obtained from Consumer Survey

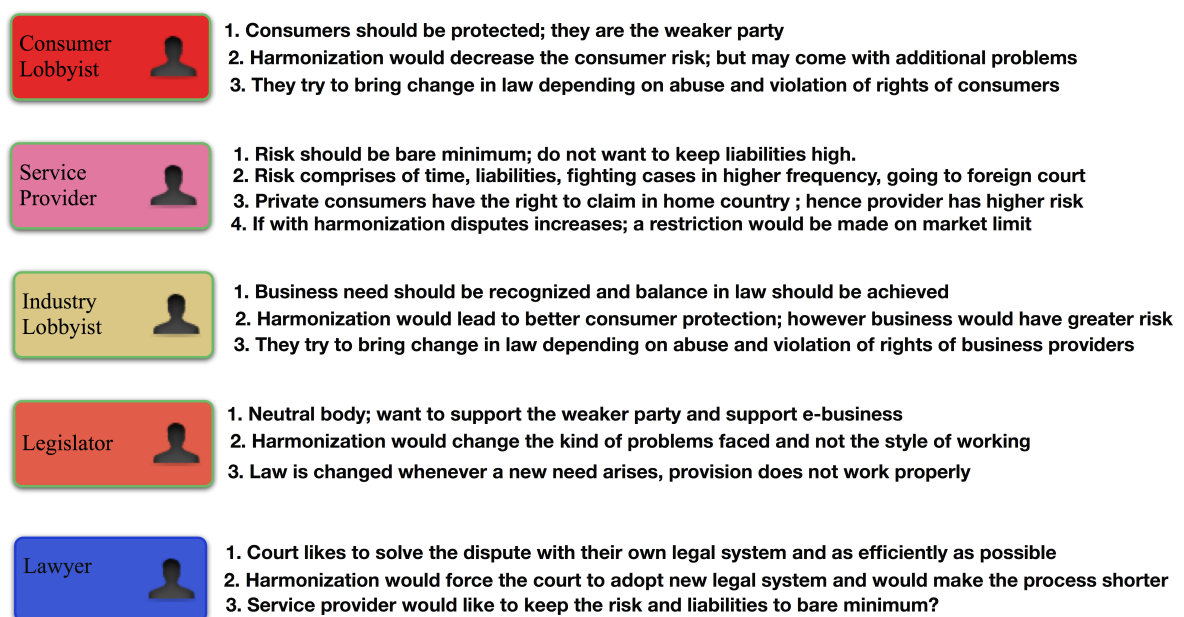


Figure 4.3: Major Learnings per Stakeholder from Interviews

harmonization of PIL will be in place the consumer lobbyist feel that the consumer would be better protected however the industrial lobbyist are of the opinion that because the harmonization would be in favor of consumers, the service providers would have a greater risk. Such a scenario would make the industrial lobbyist more active in order to better protect the party they represent.

Legislator is a neutral body and aims to improve to improve the law with changing time. Legislator on one hand try to support the weaker party, the consumer, by making law which bind the provider with some contractual obligations. On the other hand legislator frame the law also considering the interest of business provider. However, after the interview with the European Union Council it can be concluded that the laws at the present time are biased towards the consumer, at least in Europe. Also with the changing time consumer protection is becoming a “trend” amongst the law makers. For example, 30-40 years ago, no information about the ingredients of a edible product was available. But now it is a mandate to disclose such information specially because it is a matter of public health and safety. Similarly if one has a problem with a trader about a product or service he has bought, he can settle his dispute out-of-court through an ADR or Online Dispute Resolution (ODR) procedure. ADR/ODR is low-cost, fast and easy. Consumers across the EU should be able to solve any dispute with a EU-based trader without going to court [1].

The major learnings for the behavior of the court is gained with the help of lawyers. Court prefers to solve the cases with their own known law. The court’s efficiency can not be generalized. Also, if the court has rich references available it would be much more efficient in the judgement. Court would like to solve the cases as fast as possible however as the court has to go by the book the efficiency can not be altered much. So in the times when the harmonization is in place the legal system would become more certain, which would not only effect the efficiency and credibility of the court but also reduce the risk of service provider and the consumer. However, there are also some disadvantages, namely that the court would have to give up certain traditions of their own legal culture which they would not prefer. Having said that if the harmonization gives simple laws and short track procedure court would prefer that owing to the rule that “Justice delayed is justice denied!!”

4.1.5 Key Indicator Identification(Iteration 2)

Once the insight into the views and preferences was gained, the last step was to finalize the list of key indicators. The initial list obtained from the iteration 1 was revised based on the logical deductions from the knowledge gained from the analysis of empirics collection. The following section provides an update for the initial list of key indicators together with the reasoning of their inclusion/exclusion from the final list. It is important to note here that the reasons presented below are solely on the basis of the analysis of data, however the views may coincide with the reasons presented during iteration 1. But, they are re stated here owing to their relevance and validity.

Key Indicators for Consumer

– Consumer Risk

Consumers are bothered about time and cost of the entire process. They have little or no legal counsel at their disposal and therefore is unaware of the legal process. Hence consumer's first preference would be to settle the dispute with the service provider to have a speedy and cost effective settlement of his problem. His risk is also effected by how easy, access and communication to the service provider is and how far is he willing to negotiate and be transparent. His last resort after trying every other alternative (taking advise from legal insurance, talking with friends, contacting other service provider) would be to go to the court. The possibility of dispute resolution in a state outside of his domicile, in a foreign language makes the consumer even more vulnerable. Additionally, the level of involvement and the efforts required from the consumer for the entire process adds on to the consumer risk. Furthermore, the transaction duration denoting the total time involved for the entire process of dispute resolution i.e. starting from the point when the consumer decided to fight for his rights till the point wherein the dispute is settled also adds to the consumer risk. If the duration is unknown or long it would increase uncertainties, efforts and ongoing involvement from the side of the consumer. As already mentioned private person does not have substantial money at their disposal. Consumers evaluate the cost in terms of follow up, legal action, travel and time involved. Consumer with a precondition of limited money in hand focuses on a correlation between the transaction cost and the dispute value. If the transaction cost is too high, the way consumers react might change, in other words, consumer would then consider dropping the case even if he is devoid of his rights. The consumer would fix a threshold for the transaction cost beyond which he would not go ahead with the entire process. Hence, consumer has high degree of dependency on this variable while evaluating his risk and thereby deciding an appropriate plan of action.

– Consumer Awareness

Consumer in the current scenario is in the world of uncertainties and unknowns. Consumers are unaware of the rights and options provided to them by law. As mentioned before very few people are aware of ADR/ODR and similar measures. Consumers are unaware that law gives them rights beyond arguing and negotiating with the service provider. Also consumer are unaware of the contractual obligations the service provider has and feel that the provider is the master. Even if the consumer is aware of his rights he has no or a very little knowledge about the legal process. Hence, the factor of consumer awareness is very important. The better aware the consumer is, the better informed decision he can take regarding the dispute resolution.

Key Indicators for Service Provider

– Service Provider’s Risk

Service provider carefully calculates the risk while concluding the standard terms and conditions or contract. As the contract value is very less, the service provider would not like to go to court and fight the case. Specially, when the consumers have the right to claim in their home country, the provider also does not prefer to go to a foreign legal system. The service provider wants to keep his liabilities as low as possible. He does not want to bear any unnecessary cost. Also, service provider is apprehensive about the risk involved as he cannot afford to fight dispute owing the reputation at stake. It is very crucial for the service provider to have the standard terms and conditions so that the consumer cannot go to court as soon as he has a problem. To minimize the risk, service providers are always ready to solve the problems internally, by offering a compensation to the consumer.

– Market Limit

During the first iteration this factor was interpreted as the restriction to the number of contracts in any region. However, after the feedback from the stakeholder D.1 it is concluded that the restriction would rather be in terms of the countries or markets dependent on the risk faced. The service provider is interested in increasing the scope of the business as far as possible. However, they do not want any hurdles, specially from the legal point of view, when they are dealing with cross border transactions. Therefore, if the number of disputes increases the service provider would try and restrict the scope. This is because he would earn less, owing to the low cost of the service involved and would have to spend more if the rate of dispute is high. For example, when a judgement given in the consumer’s country is not applicable in the country where the service provider’s main office is then he does not care. But, if the judgement is applicable he might be forced to bear the liabilities or offer a higher compensation than he would like to give. Hence, not only due to his preference of expanding the business but also due to the risk involved with higher markets this factor is of great importance for him.

Key Indicators for Consumer Lobbyist

– Consumer Lobbyist Pressure to Change

Consumer lobbyists are primarily interested in solving the problems faced by the consumer for e.g. giving a consumer whenever possible the right to claim in the state of domicile/habitual residence, to have any dispute settlement in court of consumer’s state of domicile/habitual residence (already covered in European Law) and in the consumer’s language. Consumer Lobbyist’s main motive is to protect the parties they represent. They are the experts and based on their knowledge and facts they decide how to work towards solving a problem they come across. It is the only factor important for them because this

not only decides their strategy to work but also give an insight into the areas in which consumers are having problems.

Key Indicators for Industrial Lobbyist

– Industrial Lobbyist Pressure to Change

Industrial Lobbyist are the ones who try to protect the service provider's right in the scenario under scope. They want to foster e-business and make sure that the service provider is having no problems while doing the cross border transactions. The industrial lobbyist aims at having laws that are more balanced; rather than being biased towards any one of the parties involved in the contract. Specially in Europe as today the laws are more biased towards the consumer, they feel that there is all the more need to better protect the service provider. Also, as with the changing times business needs demand different provisions and laws, it become all the more important for the industrial lobbyist to work towards their protection of the parties they represent. Owing to the reasons mentioned it this key factor has been identified as one of the key indicators for the industrial lobbyist.

Key Indicators for Court

– Claims filed in Court

Court is a stakeholder that aims to solve the cases as efficiently and as quickly as possible. For this it is very important for the court to have cases that it could refer and give judgement more efficiently. If the process is uncertain or new for the court, its efficiency would deteriorate. Hence, if there are substantial number of cases submitted in the court, it not only has more experience for solving the case but also has more references with which the earlier cases with foreign connection were resolved. Also, contributing to this factor is the duration of dispute resolution. If the duration is high, there would be more pending cases and even the credibility of the court can go down. The shorter the duration is, more cases a court can handle.

Key Indicators for Legislator

– PIL convention orientation and material law orientation

It was reconfirmed with the interviews that legislator on one hand would try and protect the weaker party involved in the dispute, protect their rights, reduce the consumer risk, but on the other hand it would also help the intention of service provider to foster the e-business. However, legislator feels that the consumer bears higher risk and hence appropriate measures must be taken to protect their rights. Hence, if any change in the law is done it is very important for the legislator to determine the orientation of the law. Though the legislator

would try to give certain advantages to the consumer but at the same time he would like to make sure that the economical growth does not suffer owing to less cross border transactions.

– **PR**

Whenever a law is changed, it is obligatory to make sure that the consumers are made aware of the change in law and their subsequent rights. Legislator makes sure that campaigns are organized to increase the awareness of the consumers which would ultimately lead to lower risk of the consumers. The PR campaigns aim to provide the consumer with a transparent access to the mechanism of law and jurisdiction process (complex in the scenario), thereby influencing the way consumers plan their action of fighting for their rights. However, legislator would also have to invest in organizing these campaigns. Therefore this factor is very important for the legislator as not only does it serve their purpose of achieving high consumer awareness but also demands effort and resources from their side.

In addition to these there were 3 other factors which are listed in iteration 1. However, after the the empirics collection it is deduced that these are not important for the stakeholders. As a result they are deleted from the final list. For example, industrial Lobbyist had the opinion that they do not care which law needs to be changed or which change would require more efforts from their side. List of key indicators had a key factor as “Industry lobbyist decision on whether to lobby for procedural or material law change” but after this opinion it was crystal clear that though it might be a factor they might consider while evaluating the strategy of their proceedings it is not a major issue for them. Hence, this was removed from the list of final key indicators. The argumentation for exclusion of certain factors from the list of iteration 1 is presented in the following paragraphs:

– **Rate of service provider Initiated disputes settled outside the court**

For the service provider it is very important that there no dispute is filed in the court. The service provider makes sure that that their liabilities are as low as possible. The service provider while evaluating the risk and making the contract makes sure that the service provider is least responsible for any coverage once the transaction is made. Hence, the question of service provider initiating any dispute is of no relevance as they would never initiate a dispute by themselves. Specially because the cost of the service is so less, service provider believes in offering a minor compensation rather than making a dispute out of it.

– **Consumer Lobbyist’s decision to lobby for procedural or material law**

This factor is not of high relevance to the consumer lobbyist as this just decides the strategy of their working. This does not alter their interest or preference, This factor does not influence in any way the cause of consumer protection, which is of prime importance to the consumer lobbyist.

– **industrial Lobbyist’s decision to lobby for procedural or material law**

This factor is not of high relevance to the industrial lobbyist as this just decides the strategy of their working. This just not alter their interest or preference. This factor does not influence in any way the cause of business provider protection, which is of prime importance to the industrial lobbyist.

4.2 Behavioral-over-time graphs

After the identification of key indicators, their behavior with respect to time has to be determined. For achieving that, as mentioned in section 3.2.6 unit in which the key indicator can be measured has to be identified. The following sections explain in detail the unit for each key indicator, their hoped for and feared for values at the end of modeling period of 30 years and subsequently behavior-over-time graphs.

4.2.1 Quantification Table

The key indicators, as explained in previous sections, now need to be substantiated in terms of their unit and values in hoped for and feared for scenarios after 30 years. The same is shown in Table 4.2. The reason behind the hoped for and feared for values is discussed along with the behavior-iThe reasoning behind the selection of unit and how a key indicator can be changed is explained in the following paragraphs.

Table 4.2: Key Indicators with Hoped/Feared for Values and Indication on How to Change the Indicator

| Indicator | Hoped For | Feared For | How to Change Indicator | Unit |
|---|-----------|------------|---|---|
| Consumer Risk | 108-14 | 270-34 | Change Consumer Awareness and Legal System | Euro-Days |
| Consumer Awareness | 80% | 60% | By organizing PR activities | x% of the Maximum Awareness |
| Service Provider Risk | 350 Euro | 530 Euro | Moving average of consumer act | Euro |
| Market Limit for the Service Provider | 15 | 12 | Change in Service Provider Risk | Markets |
| Consumer Lobbyist Pressure to Change | 40% | 80% | Change in Consumer Risk | x% of the Maximum Pressure |
| Industrial Lobbyist Pressure to Change | 50% | 80% | Change in Service Provider Risk | x% of the Maximum Pressure |
| PIL convention orientation and Material Law orientation | 0.25 | -0.25 | Change industry lobbyist pressure to change or consumer lobbyist pressure to change | [1,0.75,0.5,0.25,0,-0.25,-0.5,-0.75,-1.0] |
| PR | 0 | 0 | Change instrument accessibility | Euro |
| Number of Cases Filed in Court | 30 | 12 | Change consumer risk or service provider risk | Disputes/Year per service provider |

– **Consumer Risk**

Consumer Risk comprises of lot of factors and therefore is an composite function of various factors namely the cost of the legal process, the time involved starting from the point when a dispute arises till the point when the dispute is settled, involvement of foreign legal system, language owing to cross border transactions. However, all these factors directly or indirectly contribute towards the cost and time of the consumer. Therefore the unit identified is Euro-Days as shown in Table 4.2. The next important question to be answered is how can this factor be changed. To bring a change in consumer risk as identified from feedback from consumers as well as other stakeholders, mentioned in D.2, not only consumer awareness has to be changed but also legal system has to be changed which takes more measures to protect the rights of the consumers. However, if the legal system is changed and the consumer is not aware of them the risk perception would not change. Hence both of these factors contribute towards changing the risk of the consumer.

– **Consumer Awareness**

Consumer Awareness is rather a qualitative factor and can be measured only relatively. As identified after the analysis of the survey data from the consumer in Figure 4.2 consumers lack the awareness of legal process and the legal rights. Hence if the consumer is made aware of the legal system the consumer awareness would drastically change. The unit owing to the qualitative nature of this variable is identified as x% of the Maximum Awareness as shown in Table 4.2. To change the consumer awareness PR activities have to be organized and implemented.

– **Service Provider Risk**

Service provider when doing a cross border transaction with a consumer does a risk evaluation. Lot of factors namely, liabilities of a provider in case of faulty or non availability of service etc, fighting the case in a foreign court and the frequency of disputes contribute towards the risk of the service provider. However, all these factors can be attributed in terms of cost which a service provider has to bear in case of a dispute. Hence the unit is identified in terms of Euro. The service provider risk can be changed by altering how the consumer act, if the consumer are bringing more disputes the service provider's risk is higher. So the way consumers react play a crucial role in deciding the service provider's risk.

– **Market Limit**

Service provider's market limit is measured in terms of number of markets categorized by country. So 1 country is equivalent to 1 market. Hence the unit number of markets. Number of market limit i.e. the maximum span of markets the service provider cater to is restricted by the problem faced by the service provider with respect to legal requirements and cultural differences in different countries. Therefore, if the service provider risk is changed it would have an effect on the market limit.

– **Consumer Lobbyist Pressure to Change**

The pressure on the consumer lobbyist from the consumers owing to the problems they face is a relative term and is therefore measured in x% of the maximum pressure that consumers can exert on the lobbyist. As mentioned in Table 4.2 to change the pressure consumer risk would have to be changed.

– **Industrial Lobbyist Pressure to Change**

The pressure on the industrial lobbyist from the service providers owing to the problems they face is a relative term and is therefore measured in x% of the maximum pressure that service providers can exert on the lobbyist. As mentioned in Table 4.2 to change the pressure service provider risk would have to be changed.

– **PIL convention orientation and Material Law orientation**

The legal framework is always established with an aim to be balanced, however owing to the market conditions and various other factors as mentioned by one of the stakeholder in appendix D.4.1, legislators make sure that the weaker party is protected and economy of cross border transactions is also supported. Therefore, the law sometimes favors one party or the other depending on what the legislator wants to protect. Therefore a scale of negative and positive values is selected as a unit for this variable which would facilitate the representation of orientation of law. The major factor which leads to change in the orientation of law is the pressure from the lobbyist party, which in turn depends on how much pressure is exerted on them from the parties they represent.

– **PR**

To raise the consumer awareness PR activities are organized which entail investment. Therefore the unit chosen is Euro. To change the cost involved the accessibility of the PR instrument would have to be changed. That means the way PR campaigns are organized and information is spread would have to be changed.

– **Number of Cases Filed in Court**

The number of cases filed in court is measured by disputes/year per service provider. To change this variable the risk of both the parties involved in the dispute would have to be changed. The consumer risk and the service provider risk play a crucial role in determining how far are the parties ready to fight for their rights. As mentioned by service providers, given in appendix D.1, generally an out of court settlement is preferred owing to the lower complications and risk. Therefore if the risk of the parties is changed it will have a considerable effect on the number of cases filed in the court.

4.2.2 Behavior of Key Indicators

The following sections explain the behavior of the key indicators and their reasoning based on the analysis of the data retrieved from the feedback.

Consumer

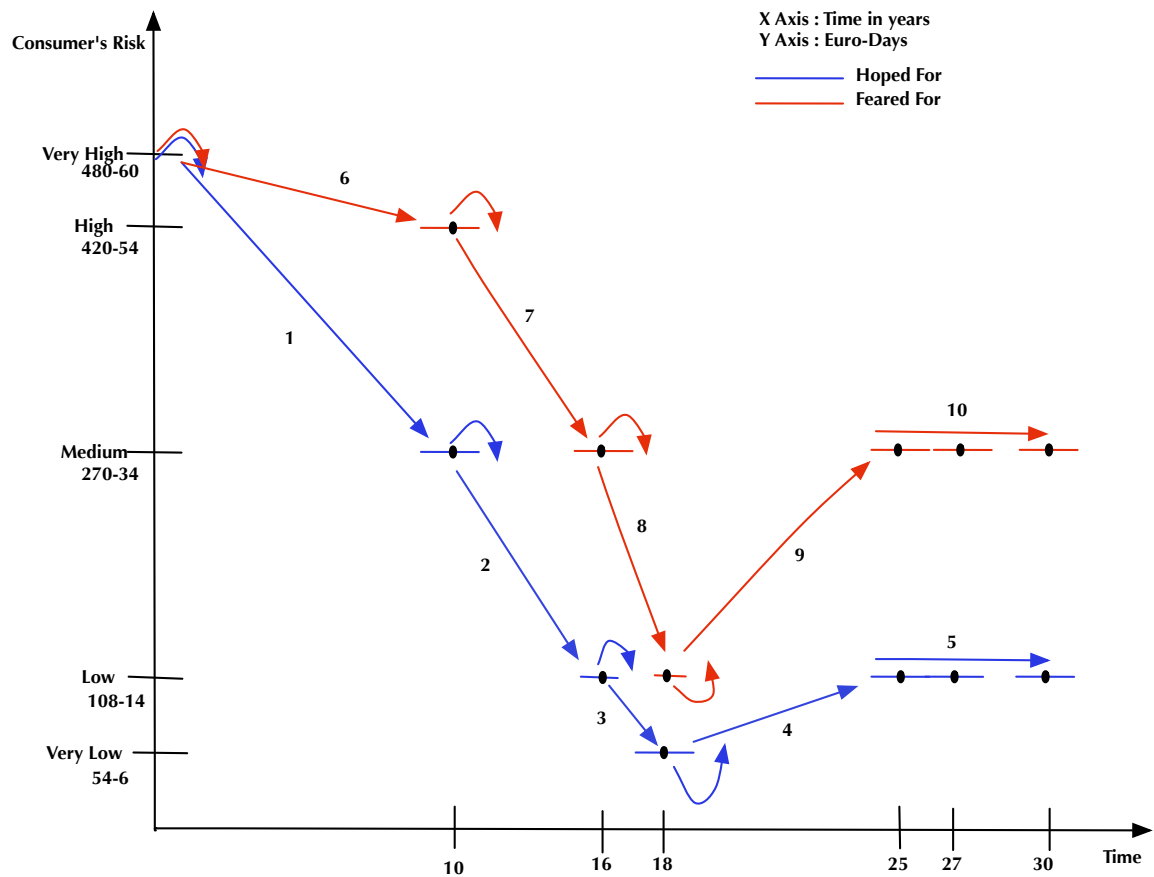
– Consumer Risk

As shown in Figure 4.4 consumer risk is a composite function with the maximum weight of 50% to cost as the consumers are majorly effected by the amount of money they need to spend on the dispute resolution process. Also the time involved in the dispute resolution process plays a crucial role in determining the risk perception of the consumer. The weight given to time is 30%. However, there are other factors related to the legal process and the strong position of the service provider which add to the risk of the consumer with a weight of 20%. These factors though being qualitative in nature can be measured in terms of cost and time. Hence making the contribution of cost as 60% and that of time as 40% to the composite function of risk. Values for y axis have determined and categorized as Very High, High, Medium, Low and Very Low risk as shown in Table 4.3. As mentioned in [11] for small valued claims until 3000 Euro, the average cost which the consumer has to bear is around 900 Euro [11, 15]. The average time required from the point the dispute is filed till the judgement is given is 170 days [11, 15]. Hence, each of these levels is attributed with a Euro-Day value which is obtained from a joint calculation based on comprising factors of composite variable of risk and level of risk. For example, for level of very high risk, cost is 90% of 900 Euro. However, as the cost contributes 60% to the final risk therefore it comes to be 480 Euro. Similarly with respect to time very high risk is attributed with 90% of 170 Days. However, as time contributes 40% to the final risk therefore it comes to be 60 Days. Similarly for very low risk cost is 10% of 900 Euro. However, as the cost contributes 60% to the final risk therefore it comes to be 54 Euro. With respect to time very low risk is attributed with 10% of 170 Days. However, as time contributes 40% to the final risk therefore it comes to be 6 Days. The Table 4.3 has a list of the percentage scale attributed to the risk level, based on which other Euro-days values are obtained. The relevance of these levels of risk is that whenever a cost and time value in between is calculated, it can be rounded of the nearest level.

Table 4.3: Percentage Value of Risk Level for Consumer

| Risk Level | Percentage Value |
|------------|------------------|
| Very High | 90 |
| High | 80 |
| Medium | 50 |
| Low | 20 |
| Very Low | 10 |

The important milestones when the consumer risk would be majorly effected are shown in the Table 4.4 which are a consequence of the time lag in the causal diagrams shown in appendix A obtained from the previous research method. Dependent on these milestones in the x axis and weighted value of consumer



Consumer Risk is an aggregated function comprising of following factors with different weight

| Factor | Weight |
|---|--------|
| Cost | 50% |
| Time | 30% |
| Foreign Legal System and Language, Stronger Service Provider, Communication with Service Provider | 20% |

Meaning and reasoning for assumed change in the behavior for "Hoped for" and "Feared For" cases

- 1,6 Decrease mainly owing to Harmonized PIL coming into action after 10 years
- 2,7 Decrease owing to rising awareness because of PR campaigns
- 3,8 Decrease owing to rising awareness because of word of mouth impact
- 4,9 Increase owing to industrial lobbyist actions to protect the interest of service provider and its subsequent PR campaigns
- 5,10 No substantial change because of word of mouth and subsequent counter consumer lobbyist actions would take longer time which goes beyond the modelling time period

Figure 4.4: Behavior-over-time-graph for Consumer Risk

Table 4.4: Milestone Events for Consumer Risk and Consumer Awareness

| Milestone Event | Significance |
|-----------------|---|
| 10 | Harmonized PIL in place: Fast track dispute resolution procedure for low dispute values out of consumer contracts with international relation in effect |
| 16 | Effect of PR campaign (advertising the availability of the new fast track instrument) on consumer awareness at its peak |
| 18 | Word-of-mouth effect on consumer awareness at its peak |
| 25 | Effect of PR campaign, after industry lobbyists-driven counter actions, on consumer awareness at its peak |
| 27 | Word-of-mouth effect on consumer awareness at its peak |
| 30 | End of modeling period |

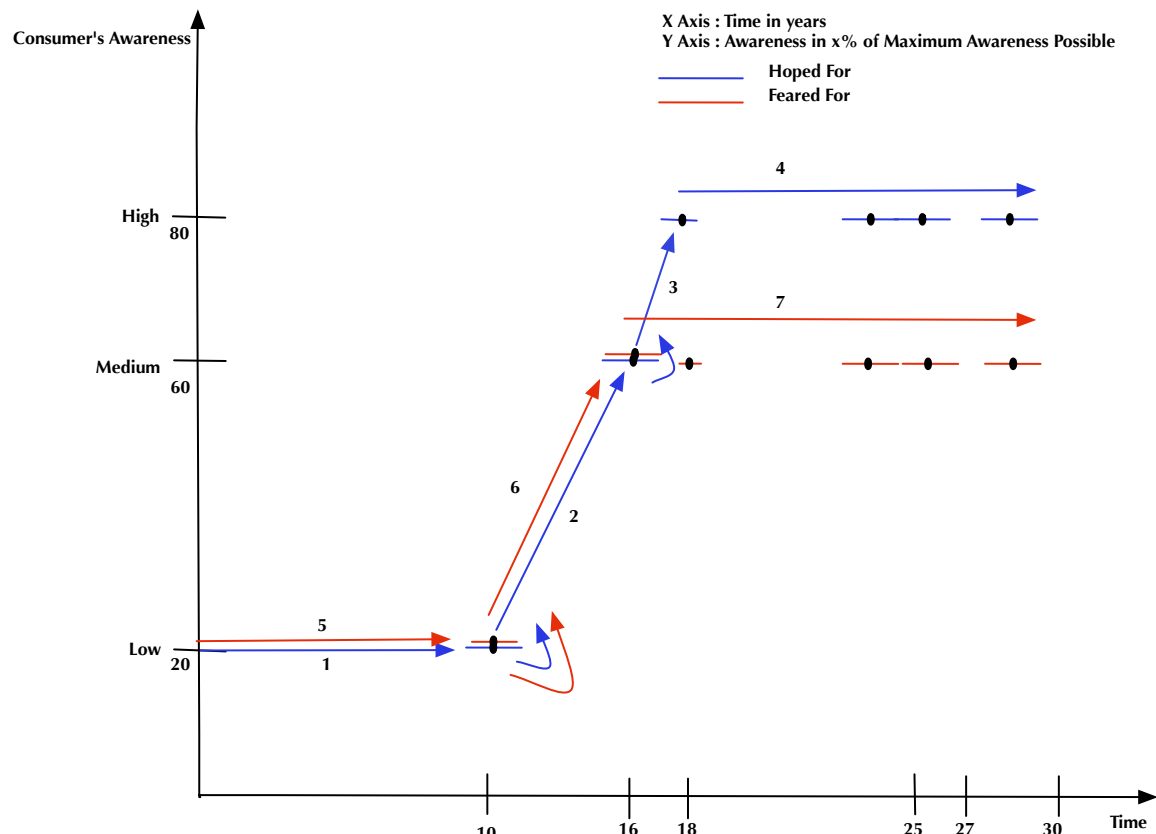
risk in Euro-days behavior-over-time graph for the consumer risk is achieved as shown in the Figure 4.4.

As shown in the hoped for behavior (marked with blue), the risk decreases and reaches the medium level at the point when the first milestone of harmonization of PIL is in effect . After this PR activities start, hence increasing the consumer awareness and reducing the consumer risk. Therefore for the next 5 years the risk tends to decrease and reach a low level when the PR activities are its peak. After this the consumer awareness increases due to word of mouth activities which cause further decrease and makes the risk touch a very low level. However, after this the service provider lobbyist start taking counter measures and the consumer risk start to increase and reach low level again. The PR activities and word of mouth events though make the consumer aware of the further changes in the law but does not have a considerable effect on the risk. At this point, however, consumer lobbyist would also start taking counter actions but that the result of that would be visible with due course of time and that goes beyond the modeling period. Thus till the end of modeling period the risk remains constant at the low level.

On the other hand, the feared for scenario (marked with red) though has the same trend of behavior, the consumer would fear the values to remain at the higher end as compared to the hoped for scenarios. Thus, the feared for value at the end of the modeling period is on a medium level.

– Consumer Awareness

Consumer Awareness is effected by two factors, namely the awareness of legal process and legal rights. However, these are qualitative measures (can not be quantified), hence the consumer awareness is marked as 3 leveled scale of High, Medium, Low as shown in Figure 4.5. The relevance of these levels of awareness is that whenever a estimation of awareness is done in terms of legal process and legal rights know-how it can be rounded to the nearest level of awareness.



Consumer Awareness is an aggregated function comprising of following factors with different weight

| Factor | Weight |
|---------------|--------|
| Legal Process | 65% |
| Legal Rights | 35% |

Meaning and reasoning for assumed change in the behavior for "Hoped for" and "Feared For" cases

- 1,5 No change as compared to current awareness as PR campaigns would start only after the implementation is in place
- 2,6 Increase owing to rising efforts in PR campaigns
- 3 Increase because of the impact of word of mouth
- 4 No further change in awareness level; although the consumers would be updated about the changes made in law because of industrial lobbyist actions.
- 7 No substantial change in the awareness level because of first round of word of mouth and subsequent PR owing to counter industrial lobbyist actions and second round of word of mouth

Figure 4.5: Behavior-over-time-graph for Consumer Awareness

The major milestones when the consumer awareness would be substantially effected are same to as that of the consumer risk as are shown in the Table 4.4 which are a consequence of the time lag in the causal diagrams shown in appendix A obtained from the previous research method. Dependent on these milestones in the x axis and weighted level of awareness in y axis, behavior-over-time graph for the consumer awareness is achieved as shown in the Figure 4.5.

As shown the hoped for behavior (marked with blue), the consumer awareness remains constant till the harmonization of PIL is in effect. However, after that as PR activities try and increase the awareness of the consumer the awareness reaches to medium level of 60% awareness. Later, even the word of mouth activities within the consumers raises it further to a high level of 80% awareness denoted by high awareness. From this point the rest of the milestones though would demand PR activities and subsequent word of mouth events but would not change the awareness level.

On the other hand, the feared for scenario marked with red though has the same trend of behavior, the consumer would fear the values to remain at the lower end as compared to the hoped for scenarios. Thus, the feared for value at the end of the modeling period is on a medium level.

Service Provider

– Service Provider Risk

Service provider calculates his risk with utmost caution and factors like liabilities with 10% weight, frequency of disputes raised with 40% weight and chances of handling cases in a foreign court with foreign legal system and language contribute with 50% weight towards his risk as mentioned by stakeholder D.1. However, all these factors are a cause of concern owing to the cost entailed. Various risk levels are determined namely Very High, High, Medium, Low and Very Low risk. The cost of legal dispute as mentioned in [11, 15] for small valued claims until 3000 Euro which the provider has to bear is around 900 Euro. However, the cost owing to the liabilities as found in contracts and legal frameworks of various countries varies from 25% to 50% of the contract value [11, 15]. The maximum liability cost therefore is taken to be 750 Euro. Each one of these is attributed with a cost value which is calculated with two factors in mind. First the various percentage level given to the level of risk as shown in Table 4.5. Secondly with respect to the cost of legal process and liabilities multiplied with their weight shown in Figure 4.6. For example, the cost of 800 Euro at very high level of risk is due to the calculation of 90% of (10% of 750 + 50% of 900 + 40% of 900). The cost for very low risk is attributed with the calculation of 10% of (10% of 750 + 50% of 900 + 40% of 900). The relevance of these levels of risk is that whenever a cost in between two levels is calculated, it can be rounded off to the nearest level.

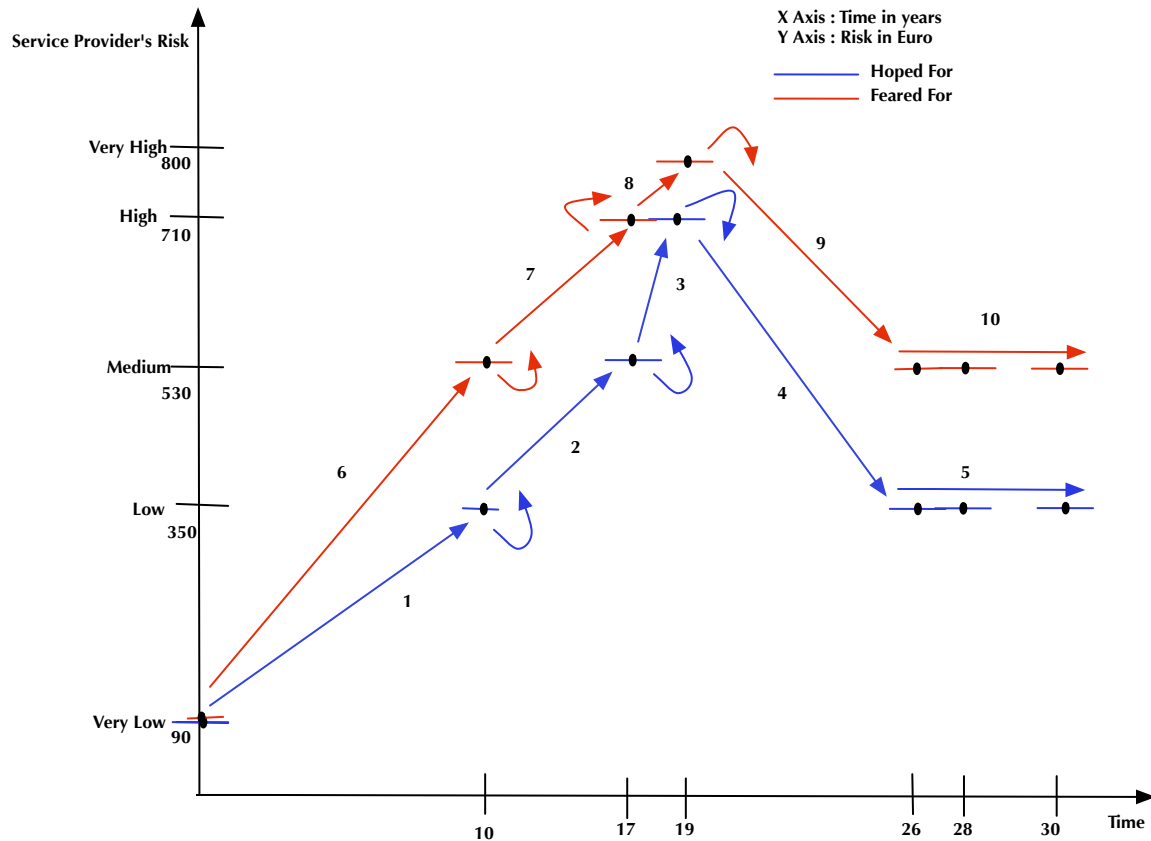
The major milestones as shown in Table 4.6 are result of the feedback obtained from D.1 and the time lag in the causal diagrams shown in appendix A obtained

Table 4.5: Percentage Value of Risk Level for Service Provider

| Risk Level | Percentage Value |
|------------|------------------|
| Very High | 90 |
| High | 80 |
| Medium | 60 |
| Low | 40 |
| Very Low | 10 |

Table 4.6: Milestone Events for Service Provider Risk and Market Limit

| Milestone Event | Significance |
|-----------------|---|
| 10 | Harmonized PIL in place: Fast track dispute resolution procedure for low dispute values out of consumer contracts with international relation in effect |
| 17 | Effect of PR campaign (advertising the availability of the new fast track instrument) on consumer awareness at its peak |
| 19 | Word-of-mouth effect on consumer awareness at its peak |
| 26 | Effect of PR campaign, after industry lobbyists-driven counter actions, on consumer awareness at its peak |
| 28 | Word-of-mouth effect on consumer awareness at its peak |
| 30 | End of modeling period |



Service Provider's Risk is an aggregated function comprising of following factors with different weight

| Factor | Weight |
|-----------------------------------|--------|
| Liabilities | 10% |
| Handling dispute in foreign court | 50% |
| Frequency of dispute | 40% |

Meaning and reasoning for assumed change in the behavior for "Hoped for" and "Feared For" cases

- 1,6 Increase mainly owing to Harmonized PIL coming into action after 10 years
- 2,7 Increase owing to rising awareness of consumer because of PR campaigns
- 3,8 Increase owing to rising awareness of the consumer because of word of mouth impact
- 4,9 Decrease owing to industrial lobbyist actions to protect the interest of service provider and its subsequent PR campaigns actions on consumer awareness
- 5,10 No substantial change because of word of mouth impact on consumer awareness and subsequent counter consumer lobbyist actions would take longer time which goes beyond the modeling time period

Figure 4.6: Behavior-over-time-graph for Service Provider Risk

from the previous research method.

As shown in the Figure 4.6 the hoped for behavior (marked with blue), service provider risk increases from the the current very low risk to low risk after the end of 10 years, marked by the harmonization of PIL coming into force. As the consumers become more aware of their legal rights and the legal process owing to the rising PR activities the risk for the service provider further increases and reaches to the level of medium. In the next two years it increases more owing to the word of mouth activities and reaches the level of very high risk. From now on, the service provider lobbyists take measure to bring a change in the law in favor of the service provider. Owing to this the risk again drops and as the PR campaigns once again reaches to it peak at the end of 26 years, the risk reaches to low level. From henceforth the risk maintains the level till the end of the modeling period as any action by consumer lobbyist would take time, which goes beyond modeling period.

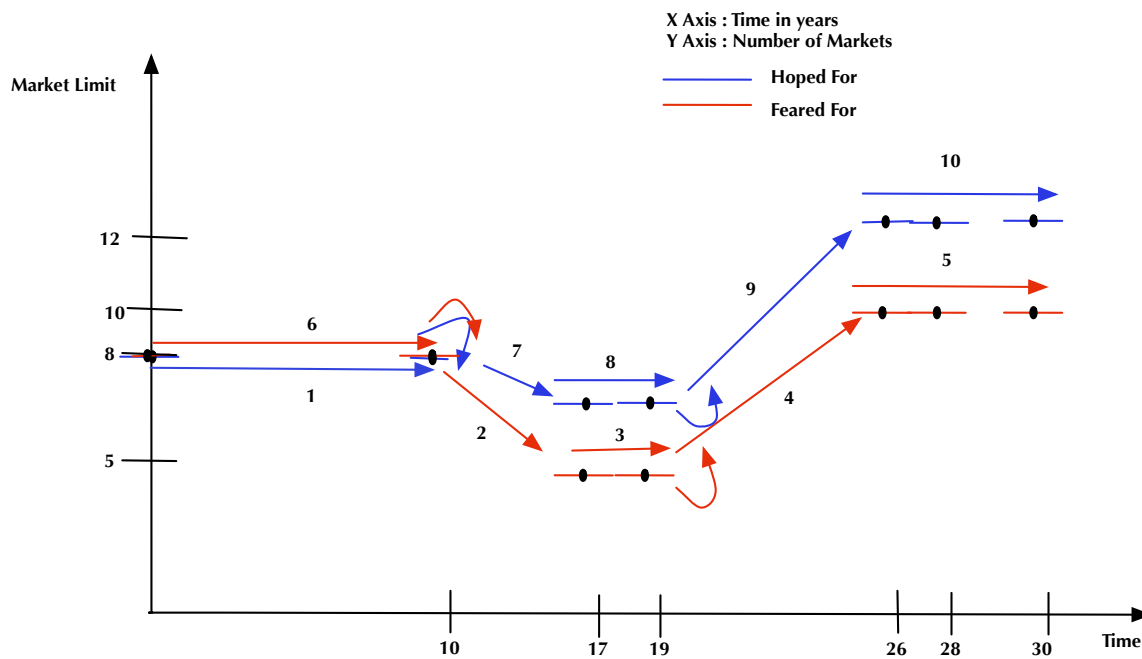
On the other hand, the feared for scenario marked with red though has the same trend of behavior, the service provider would fear the values to remain at the higher end as compared to the hoped for scenarios. Thus, the feared for value at the end of the modeling period is on a medium level.

– Service Provider Market Limit

Service Provider on the one hand wants to increase the market share but on the other hand is afraid of the legal intricacies in cross border transactions and higher frequency of disputes. Therefore service provider limits the number of countries it caters to. One way of restricting can be on the basis of similar culture and economic development. For example, European Union has 27 states out of which neither do the countries have same economic status nor they have same culture. The countries which are more economically developed tend to buy such services more as compared to developing or under developed countries. Also other factors which play crucial role is of culture, language across the borders. The neighboring and second neighboring countries tend to have a similar culture than far located countries. Music offering company like Spotify has availability in 13 countries across the globe [6]. On the hand an automated music recommendation service Pandora serves only 3 countries [5]. As a result on a average a number of 8 markets is taken as a present status of number of markets covered.

The major milestones as shown in Table 4.6 are result of the feedback obtained from D.1 and the time lag as shown in the causal diagrams A obtained from the previous research method.

As shown in the Figure 4.7 the hoped for behavior (marked with blue), the market limit remains constant till the point when the harmonization of PIL comes in effect. However, owing to rising awareness of the consumer the service provider would try and restrict the market limit. Therefore it decreases till 16 years. After that it remains constant till 19 years and then again increases owing to the counter actions of the industrial lobbyist. The remaining of the time span it remains constant, because market limit is not very dynamic and shows slow change. Thus, the hoped for value at the end of the modeling period



Meaning and reasoning for assumed change in the behavior for "Hoped for" and "Feared For" cases

- 1,6 Constant till Harmonized PIL comes into action
- 2,7 Decrease owing to rising awareness of consumer because of PR campaigns
- 3,8 No substantial change owing to rising awareness of the consumer because of word of mouth impact
- 4,9 Increase owing to industrial lobbyist actions to protect the interest of service provider and its subsequent PR campaigns actions on consumer awareness
- 5,10 No substantial change because of word of mouth impact on consumer awareness and subsequent counter consumer lobbyist actions would take longer time which goes beyond the modeling time period

Figure 4.7: Behavior-over-time-graph for Market Limit

is at 12.

The feared for scenario marked with red though has the same trend of behavior, the service provider would fear the values to remain at the lower end as compared to the hoped for scenarios. Thus, the feared for value at the end of the modeling period is only at 10.

Consumer Lobbyist

– Consumer Lobbyist Pressure to Change

Consumer Lobbyist pressure is measure in terms of x% of maximum pressure since the variable can not be quantified. On the y axis 5 levels are recognized namely Very High, High, Medium, Low and Very Low each having a percentage level as shown in Figure 4.8. Whenever a pressure between two levels it would be rounded to the nearest level.

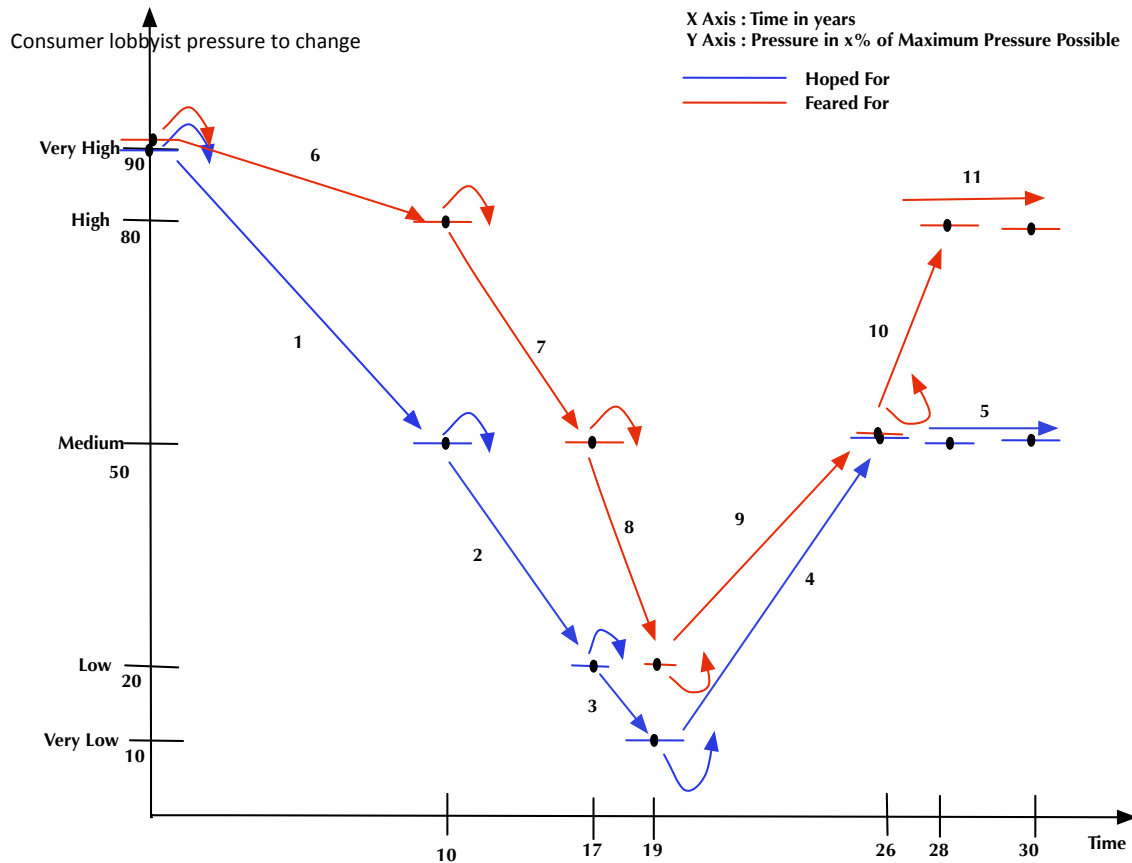
The major milestones as shown in the Table 4.7 are the result of the feedback from the D.2 and the time lag in the causal diagrams as shown in appendix A obtained from the previous research method. The consumer lobbyist are the first point where the effect of the consumer risk is scene. As shown in the causal loop, the consumer lobbyist pressure is solely effected by the way consumer perceive their risk.

As shown in the Figure 4.8 the hoped for behavior (marked with blue), the consumer lobbyist pressure at present is very high, owing to the high risk of the consumer. However, with time it tends to decrease as consumer lobbyist are exerting pressure to bring about changes which are in favor of consumer and with the harmonization of PIL coming into effect this variable would reach the medium level. As the consumers would be made aware with PR campaigns and the subsequent word of mouth activities the pressure would even go down and reach to a level of very low. However, as now even the consumer risk would decrease and the service provider would feel the need to be protected, industrial lobbyist would start taking measures. As a result once again the pressure would increase and reach the level of medium. From henceforth, the pressure would remain same till the end of the modeling period as the consumer lobbyist actions to change anything in law would take time and that goes beyond the modeling period.

The feared for scenario marked with red though has the same trend of behavior, the consumer lobbyist would fear the values to remain at the higher end as compared to the hoped for scenarios. One difference in feared for scenario is marked with 10 in the Figure 4.8 which depicts the increase in pressure owing to the further rise in awareness of consumer because of word of mouth. Thus, the feared for value at the end of the modeling period is at high level.

Industrial Lobbyist

– Industrial Lobbyist Pressure to Change



Meaning and reasoning for assumed change in the behavior for "Hoped for" and "Feared For" cases

- 1,6 Decrease mainly owing to Harmonized PIL coming into action after 10 years
- 2,7 Decrease owing to rising awareness of the consumer because of PR campaigns
- 3,8 Decrease owing to rising awareness of the consumer because of the impact of word of mouth
- 4,9 Increase owing to industrial lobbyist actions to protect the interest of service provider and its subsequent PR campaigns
- 10 Increase owing to rising awareness of the consumer because of the impact of word of mouth
- 5,11 Constant Pressure as any counter actions would take time which is beyond modeling period

Figure 4.8: Behavior-over-time-graph for Consumer Lobbyist Pressure to Change

Table 4.7: Milestone Events for Consumer Lobbyist Pressure to Change

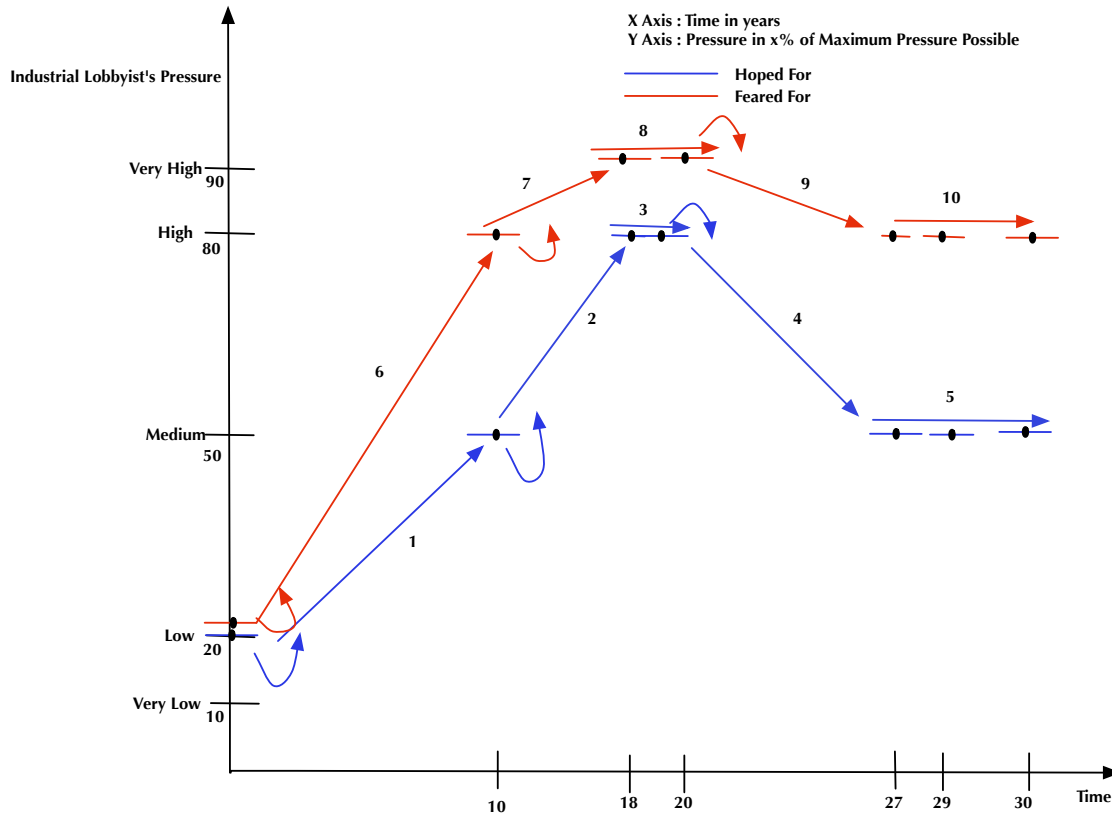
| Milestone Event | Significance |
|-----------------|---|
| 10 | Harmonized PIL in place: Fast track dispute resolution procedure for low dispute values out of consumer contracts with international relation in effect |
| 17 | Effect of PR campaign (advertising the availability of the new fast track instrument) on consumer awareness at its peak |
| 19 | Word-of-mouth effect on consumer awareness at its peak |
| 26 | Effect of PR campaign, after industry lobbyists-driven counter actions, on consumer awareness at its peak |
| 28 | Word-of-mouth effect on consumer awareness at its peak |
| 30 | End of modeling period |

Industrial Lobbyist pressure is measure in terms of x% of maximum pressure as this variable cant be quantified. On the X axis y levels are recognized namely Very High, High, Medium, Low and Very Low each having a percentage level. Whenever a pressure between two levels it would be rounded to the nearest level.

The major milestones as shown in the Table 4.8 are the result of the feedback from the D.3 and the time lag in the causal diagrams as shown in appendix A obtained from the previous research method.

At the present time as the service provider risk is low, the industrial lobbyist pressure is also at low level. However, as the measures are continuously taken to protect the consumer rights as mentioned by various stakeholders D.3, D.2, D.1, D.4.1 service provider tends to increase the pressure till the milestone when harmonization of PIL is in effect. Next, as the PR campaigns tend to increase the awareness of the consumer, the service provider would feel vulnerable and therefore the pressure would further increase to the level of High. The word of mouth activities do not have a substantial impact on the industrial lobbyist action, however, as the pressure has been on a continuos raise, the hope is that industrial lobbyist would be successful in changing the law partially to the favor of the service provider. Hence, for the next 7 years the pressure would see a downward trend reaching to a level of Medium. However, as foreseen by the stakeholders D.3 the pressure is going to be at least at medium level, owing to biased law towards the consumer.

The feared for scenario marked with red though has the same trend of behavior, the industrial lobbyist would fear the values to remain at the higher end as compared to the hoped for scenarios. Thus, the feared for value at the end of the modeling period is at high level. That implies in feared for scenario the industrial lobbyist fear that the pressure would only increase by 60% as compared to current times. This conveys that the industrial lobbyist fears that the service provider would face lot of problems in disputes arising from cross border transactions as the laws would favor the consumers, thereby increasing



Meaning and reasoning for assumed change in the behavior for "Hoped for" and "Feared For" cases

- 1,6 Increase mainly owing to Harmonized PIL coming into action after 10 years
- 2,7 Increase owing to rising awareness of the consumer because of PR campaigns would increase service provider's risk also
- 3,8 No substantial change even though there is an increase in awareness of the consumer because of the impact of word of mouth
- 4,9 Decrease with time as the efforts would have made changes in the law, in favor of service provider
- 5,10 Constant till the end of modeling period

Figure 4.9: Behavior-over-time-graph for Industrial Lobbyist Pressure to Change

the risk of the service provider.

Table 4.8: Milestone Events for Industrial Lobbyist Pressure to Change

| Milestone Event | Significance |
|-----------------|---|
| 10 | Harmonized PIL in place: Fast track dispute resolution procedure for low dispute values out of consumer contracts with international relation in effect |
| 18 | Effect of PR campaign (advertising the availability of the new fast track instrument) on consumer awareness at its peak |
| 20 | Word-of-mouth effect on consumer awareness at its peak |
| 27 | Effect of PR campaign (after industry lobbyists-driven counter actions) on consumer awareness at its peak |
| 29 | Word-of-mouth effect on consumer awareness at its peak |
| 30 | End of modeling period |

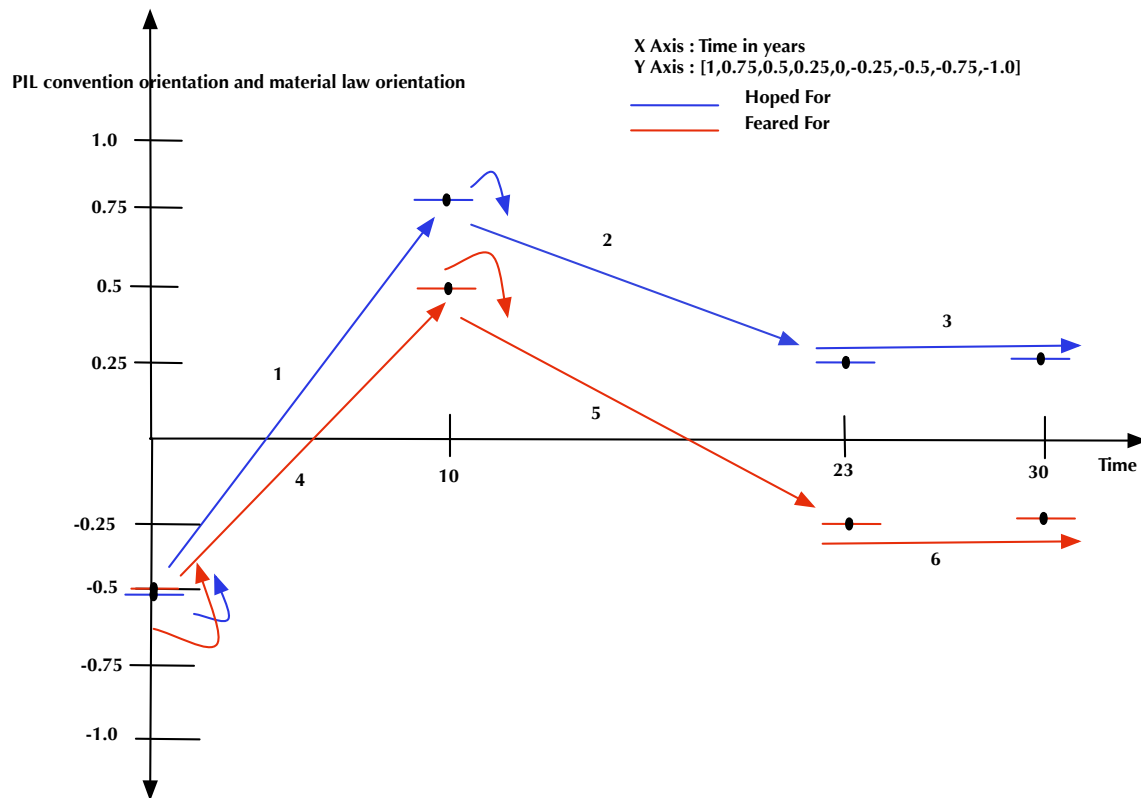
Legislator

– PIL convention orientation and material law orientation

The law makers always evaluate the need of the hour and make appropriate changes in the law. The current situation, for example, find the consumers to be the bearers of the maximum risk and are identified as the weaker party when a dispute is raised D.2, D.4.1. Therefore, constant measures are taken so that the consumer rights are safeguarded and necessary changes in the law are made. However, on the other hand even the economy boost up is an important factor to be considered while framing the law. For example, in Europe with Brussels coming into force in many countries consumer protection is given priority. However, in U.S.A government gives priority to safeguard the interest of the service provider. They claim if enough rights are not given to the provider, good services/products would not be manufactured and that will be harmful even for the consumer [11]. Hence, though the legislator would try to be balanced as far as possible, the law would be biased in favor of one party or the another party. Therefore the scale here denotes the gravity of bias. Positive scale denotes that the law is in favor of the consumer whereas the negative scale denotes the bias is in favor of the provider.

The major milestones as shown in the Table 4.9 are the result of the feedback from the D.4.1 and the time lag in the causal diagrams as shown in appendix A obtained from the previous research method.

To bring about a change in law is a lengthy process and therefore the behavior-over-time graph is not dynamic as compared to other graphs. In the time span of 30 years, only 2 events are foreseen, which would bring change in the orientation of law. Today the law is biased towards the service provider, however, as the harmonized PIL would come into effect the hope is that it



Meaning and reasoning for assumed change in the behavior for "Hoped for" and "Feared For" cases

- 1,4 Owing to Harmonized PIL coming into action after 10 years the orientation would be biased towards the consumer
- 2,5 Owing to industrial lobbyist actions to protect the interest of service provider the bias would move towards service provider
- 3,6 No substantial change in the bias as further change in law would take more time which is beyond modeling period

Figure 4.10: Behavior-over-time-graph for PIL convention orientation and material law orientation

would be biased 75% in favor of the consumer. The reason for such a high change is because in the current scenario lot of pressure is there to protect the consumer rights and the law makers understand the need to protect the weaker party. However, then the industrial lobbyist would try and protect their party and therefore the hope is that though the law would be changed again owing to lobbyist pressure but would still be biased in favor of the consumer. This level would be maintained till the end of modeling period.

In the feared for scenario though the harmonization of PIL coming into force would still be attributed with consumer bias characteristics but of lesser magnitude. However, as the pressure from the industrial lobbyist group increases the fear is that once again the law would be towards the service provider, though of lower gravity.

Table 4.9: Milestone Events for PIL convention orientation and material law orientation

| Milestone Event | Significance |
|-----------------|---|
| 10 | Harmonized PIL in place: Fast track dispute resolution procedure for low dispute values out of consumer contracts with international relation in effect |
| 23 | Industrial lobbyist are successful in taking measures in favor of service providers |
| 30 | End of modeling period |

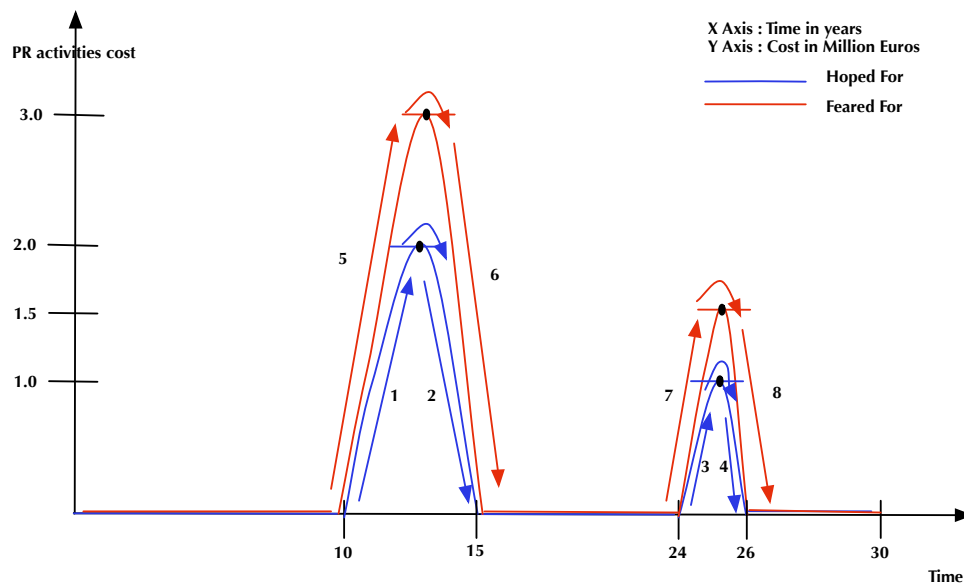
– PR

Whenever a law is changed it is mandate in the law to make the effected party aware of the changes. PR campaigns are organized country specific with a pre decided budget. On an average a PR campaign today cost 1 Million Euro as identified from the stakeholder D.4.1.

Table 4.10: Milestone Events for PR

| Milestone Event | Significance |
|-----------------|---|
| 10 | Harmonized PIL in place: Fast track dispute resolution procedure for low dispute values out of consumer contracts with international relation in effect |
| 15 | Effect of PR campaign (advertising the availability of the new fast track instrument) on consumer awareness at its peak |
| 24 | Start of PR campaign after industry lobbyists-driven counter actions |
| 26 | Effect of PR campaign (after industry lobbyists-driven counter actions) on consumer awareness at its peak |
| 30 | End of modeling period |

The milestones as shown in the Table 4.10 are identified with a reasoning



Meaning and reasoning for assumed change in the behavior for "Hoped for" and "Feared For" cases

- 1,5 Owing to Harmonized PIL, PR activities will start increasing so that the consumers are aware of the change in law
- 2,6 After reaching a peak the activities would decrease with time
- 3,7 After being 0 for a while; once again PR activities would increase to inform consumers about the change due to industrial lobbyist's actions
- 4,8 After reaching a peak the activities would decrease with time

Figure 4.11: Behavior-over-time-graph for PR

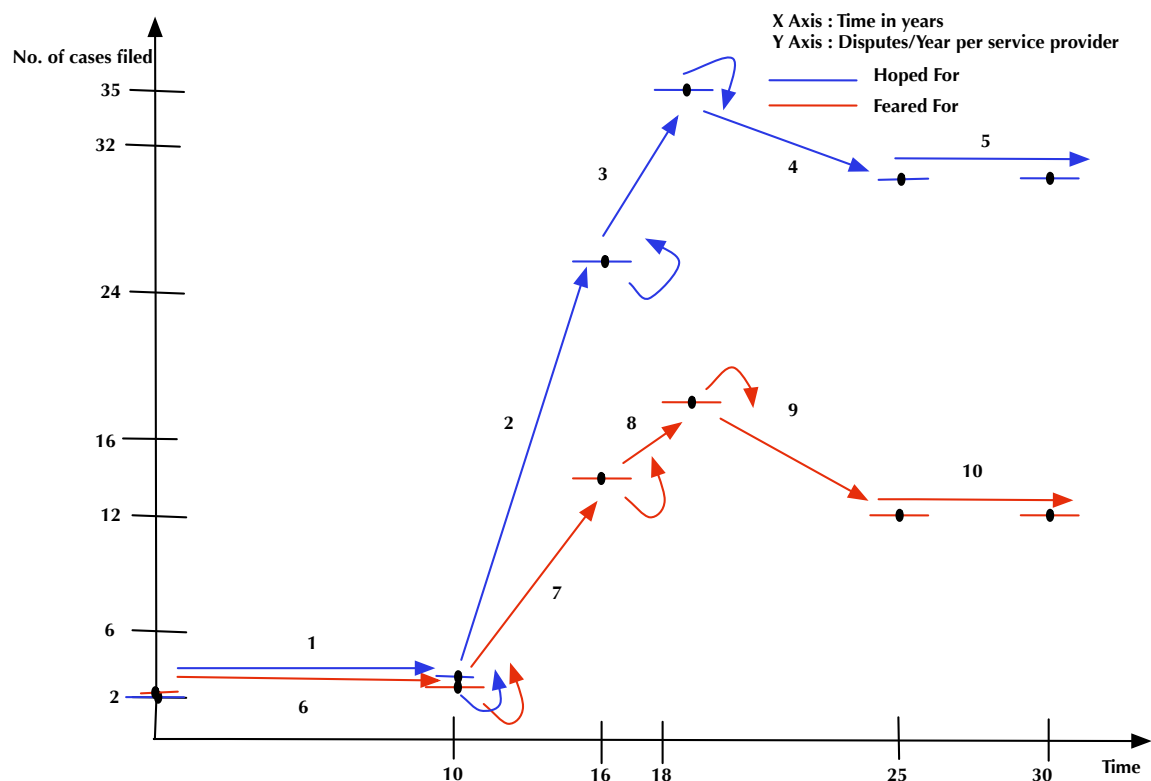
grounded on the fact that whenever a change in the law with respect to harmonized PIL is made, a PR campaign would be organized to raise the awareness of the consumer. Therefore the PR campaign would start the moment harmonized PIL comes into force. It is assumed that as harmonization is an important change in law it would accompany higher investment in PR activities. With each passing year the PR activities increases till the point when the maximum affordable budget is reached and the awareness of the consumer reaches its peak. At this point again a downward trend is seen. As mentioned by D.4.2 the PR campaign is specific to the level of awareness. Until and unless the consumers start applying the information given to them the knowledge would tend to decrease. However, this process would take time and hence the bell shaped curve. At the end of 15 years it again touches to 0. Later when the industrial lobbyist are successful in bringing a change in the law, once again the PR activities start and reach to its peak again to fade away with time. Though the trend for both hoped for and feared for scenario is the same the investment foreseen varies. The feared for scenario is attributed with higher investment as shown in Figure 4.11.

Court

– Number of Cases Filed in Court

In the year of 2008, the total number of civil and commercial cases in Europe

are around 40000000 [19]. However owing to the fact that today very few cases which fall under the category of small valued claims go to court, assumption is made that only a small fraction, say 50 out of 100000, of the total disputes fall into the category under consideration. Assuming that in Europe at present there are about 1000 service provider of various caliber. The number of disputes per year per service provider comes to be 2. This figure also matches to the feedback provided by the stakeholder D.1. The hoped for scenario is that the number of small valued claims filed would be at least 15 times as shown in Table 4.2 . On the other hand, the feared for scenario is that it would rise only by 6 times, hence reaching to the figure of 12. The expectancy behind such a raise is attributed to the decreased risk of the consumer and the increasing awareness. Hence, the major contribution towards the raised number of cases is due to the cases filed by the consumers.



Meaning and reasoning for assumed change in the behavior for "Hoped for" and "Feared For" cases

- 1,6 Constant till Harmonized PIL comes into action
- 2,7 Increase owing to rising awareness of consumer because of PR campaigns
- 3,8 Increase owing to rising awareness of the consumer because of word of mouth impact
- 4,9 Decrease owing to industrial lobbyist actions to protect the interest of service provider and its subsequent PR campaigns actions on consumer awareness
- 5,10 No substantial change because of word of mouth impact on consumer awareness and subsequent counter consumer lobbyist actions would take longer time which goes beyond the modeling time period

Figure 4.12: Behavior-over-time-graph for Number of Cases Filed in Court

The milestones are based on the reasoning that whenever the awareness and the risk of the parties involved in the dispute changes it would change the way

Table 4.11: Milestone Events for Number of Cases Filed in Court

| Milestone Event | Significance |
|-----------------|---|
| 10 | Harmonized PIL in place: Fast track dispute resolution procedure for low dispute values out of consumer contracts with international relation in effect |
| 16 | Effect of PR campaign (advertising the availability of the new fast track instrument) on consumer awareness at its peak |
| 18 | Word-of-mouth effect on consumer awareness at its peak therefore effecting the cases filed |
| 25 | Effect of PR campaign (after industry lobbyists-driven counter actions) on consumer awareness at its peak |
| 30 | End of modeling period |

problems are dealt with. For example, if the consumer is aware of the legal process and finds his risk to be low, he would file a case in the court. As a result 5 events are recognized as shown in the Table 4.11.

The hoped for behavior (marked with blue) in Figure 4.13 shows an increasing trend after the harmonized PIL will come into effect. This is because this is the time where the consumer gets aware of his rights and harmonized process. Also, there is a substantial reduction in the consumer risk. Therefore at the point where the awareness is at its peak, the number of cases filed are hoped to be 24. Further increase is marked owing to the rising awareness with the help of word-of mouth publicity. However, later owing to further changes in the law, which would be in favor of the service provider, there is a drop in the number of cases filed. This level is maintained till the end of the modeling period.

The feared for scenario though follows the same trend but with the fear that the number of cases filed would not change substantially with each event. Hence, when the awareness is at the peak it touches to 16 cases filed. However, the value after 30 years would be 12.

The behavior for this key indicator is majorly effected by the consumer's actions owing to the fact mentioned by service provider D.1 that they do not initiate a dispute even in the worst situation. Even when today the risk of the service provider is very low they do not initiate a dispute. After the harmonized PIL is in effect it would considerably increase the risk of the service provider hence giving them a reason not to initiate a dispute.

4.2.3 Changes in Behavior-over-time-graphs Based on Feedback

To increase the validity of the graphs drawn based on the assumptions and analysis of the empirics collected, second feedback is aimed from the stakeholders. The second

feedback is an attempt to collect the feedback for the graphs shown in previous sections. Owing to the non availability of some of the stakeholders, only some of the graphs are validated. Hence the following sections present the feedback, changes (if any) for the graphs whose corresponding stakeholders were available.

– **Consumer Risk**

For the feedback about the consumer risk, two participants were contacted and asked for their opinion on the behavior of graph for the next 30 years. Both of the participants supported the fact that cost and time are the major factors which they would consider in case of a dispute resolution. Hence, supporting the view that unit should be in Euro-Days. Though the participants could not with assurance predict the behavior, they supported the trends as depicted in Figure 4.4. Also, though consumers had no idea about the cost they have to bear in present time, they still supported the fact that the hoped for behavior for the risk should make the risk go down by 70%. For the feared for behavior the fall only by 40% is also supported.

– **Consumer Awareness**

For the feedback for this key indicator also, two participants were contacted and asked for their opinion on the behavior of graph for the next 30 years. Both of the participants supported the idea that today consumers are not aware about the legal process and legal rights. They too supported the idea, that with changing time and raising PR activities the awareness would substantially increase.

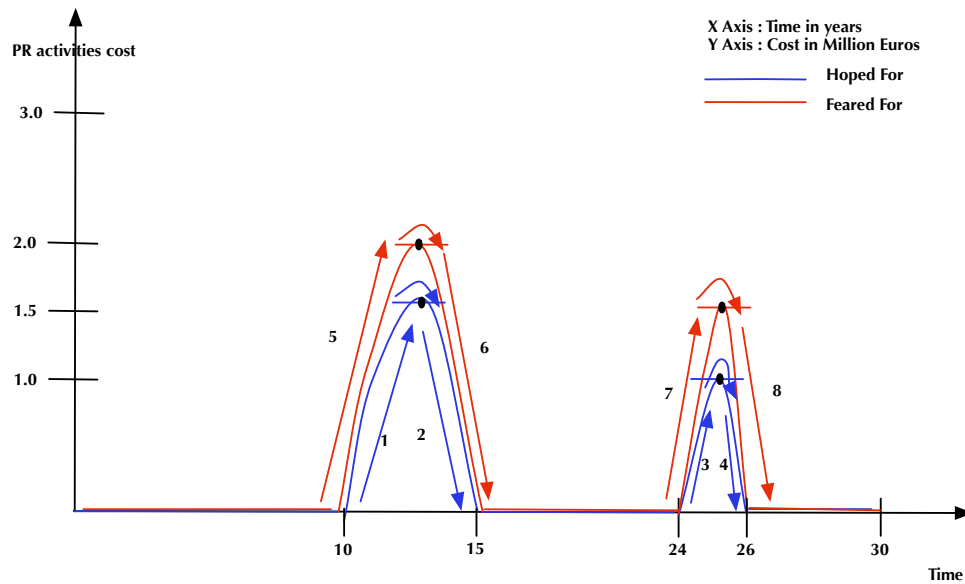
– **Consumer Lobbyist Pressure to Change**

Regarding the consumer lobbyist pressure, the stakeholder recommended that first of all, it should be clear that PIL is a harmonized contract/private law (European Civil Code). Secondly, difference between the development of ADR and the harmonization of contract law should be made. The development of the two doesn't necessarily go in parallel. Third point, the stakeholders in lobbying at EU level are not restricted to consumer organizations and industry lobbyist. The Member States have own interests all well as Commission and European Parliament. In reality, it is not the case that consumer organizations start lobbying and the the industry begins a counteroffensive and then the consumer organizations react and so on. Other factors determining if and when which organization acts are: money and other resources, other legislative acts and problems catching media attention, the possibility to make allies etc. However, such factors require a change in the modeled casual diagram, without which the assumptions of consumer lobbyist and industry lobbyist are the only people effecting the change in law. However, as far as the trend depicted for this variable is concerned, stakeholder did not raise any questions on that.

– **PR**

When contacted for the feedback regarding this key indicator the stakeholders suggested that if the law us same in every state it would marginally decrease the cost. However, as the culture is not same and language is different, messages have to be different so that it appeals to people. There can never be a uniform way of informing. However, harmonization would decrease the cost for making

the PR campaign. It will save the cost in long run. Hence, the attained graph is changed with the aim of lower cost.



Meaning and reasoning for assumed change in the behavior for "Hoped for" and "Feared For" cases

- 1,5 Owing to Harmonized PIL, PR activities will start increasing so that the consumers are aware of the change in law
- 2,6 After reaching a peak the activities would decrease with time
- 3,7 After being 0 for a while; once again PR activities would increase to inform consumers about the change due to industrial lobbyist's actions
- 4,8 After reaching a peak the activities would decrease with time

Figure 4.13: Behavior-over-time-graph for Number of Cases Filed in Court

Chapter 5

Summary and Conclusions

Driven by the status quo of the risk associated with the cross border transactions and the uncertainty of the disputes arising from such contracts the overall research theme has been determined. For reducing the risk faced by the parties involved in the contract and to give certainty to the legal questions harmonization of PIL has been chosen as chosen as a possible solution. The previous research has identified a scenario as the long-term introduction (30 years period) of a harmonized PIL applicable to electronic services in the Internet - in particular with respect to questions of dispute resolution out of a contract with international connection, namely jurisdiction and applicable law, with the scope of B2C contract relations. The overall research question has chosen system dynamics as a method to model the complex system with various stakeholders and factors. Two major milestones of system dynamics modeling, namely identification of key indicators and behavior-over-time graphs for the same determine the purpose of the thesis at hand.

Hence, this thesis is committed to follow its purpose which has been framed as to facilitate the fulfillment of systems dynamic steps. For this knowledge of stakeholders has to be retrieved so that conclusion for the most important factors by which stakeholders are effected can be reached. Also, as the modeling period is of 30 years it is very important to conclude the behavior for each of the key indicator for this time span. Hence, the behavior-over-time graphs are to be drawn.

With the relevant purpose, and problem formulated, a set of four objectives has been compiled. The objectives comprises of studying the relevant background for the thesis, selection and specification of key indicators, identification of comparable cases and acquisition of empirics and behavior-over-time graphs for all the key indicators.

5.1 Objectives Achieved

As identified the following objectives have been fulfilled. The following sections cover a brief glimpse of the achieved results.

- **Study of relevant background**

The study of the work done towards harmonization of PIL reveals that constant efforts are made by one organization or the other. With changing time

buying service online from an international provider is becoming inevitable. However, as each country has its own set of legal rules and process, the consumer bears the majority of risk. However, the efforts made so far have not been so successful and have not been able to achieve the desired results. Hence, the research envisages to achieve the harmonization with the help of the system dynamic modeling. System dynamic helps to understand such a large and complex system which has interdependent variables in the form of key indicators. The previous research also made a causal loop diagram of the system, study of which throws light on interconnectivity between various stakeholders and the factors by which they are effected.

– **Selection and specification of key indicators**

Each stakeholder is effected by various factors in such a system. However, based on the feedback from various stakeholders a list of most important variables is made. These variables are termed as key indicators by which the stakeholder is primarily concerned with. With the harmonized PIL coming into effect any change in these variables will have a implication on the way stakeholder function. The selection of the key indicators is based on the analysis of the interviews and survey conducted with the stakeholder which clearly gives a glimpse of their preferences.

– **Identification of comparable cases and acquisition of empirics**

This objective is achieved with the help of the detailed interviews and online survey in case of the consumer. The interviews with the experts gave an insight into the problems more deeply with many comparable cases. In addition to the stakeholders knowledge, comparable cases are also retrieved from various publications and books. The comparable cases and figures give the guideline in achieving the next objective of behavior-over-time graphs for all key indicators.

– **Behavior-over-time graphs for all key indicators**

The last contribution of the work in hand is to draw the behavior of key indicators over time. This is achieved with the help of the feedback from the recognized actors who represent the stakeholders. The knowledge retrieved from them with logical analysis lead to the choice of not only the unit with which they are represented but also the trend which the variable follows for the modeling period of 30 years.

In conclusion, the analysis for the objectives raised initially reveals that all objectives have been met successfully. This means that in addition to the set of effectively addressed objectives, the contributions achieved in this thesis provide sufficient support for the future step embedded in the overall research in the CSG department.

5.2 Future Work

The current thesis is embedded in a bigger research work of the department. As a consequence, the future steps comprise of the next steps of system dynamics modeling. The behavioral-over-time graphs will form the basis for achieving the next step in the in the overall system dynamics procedure. It will provide necessary

information to implement the model in an executable manner in the used modeling tool, Vensim.

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Abbreviations

| | |
|----------|--|
| ABM | Agent Based Modeling |
| ADR | Alternative Dispute Resolution |
| B2C | Business-to-Consumer |
| HCCH | The Hague Conference |
| CIDIP | Specialized Conferences on Private International Law |
| ODR | Online Dispute Resolution |
| PIL | Private International Law |
| UNIDROIT | International Institute for the Unification of Private Law |

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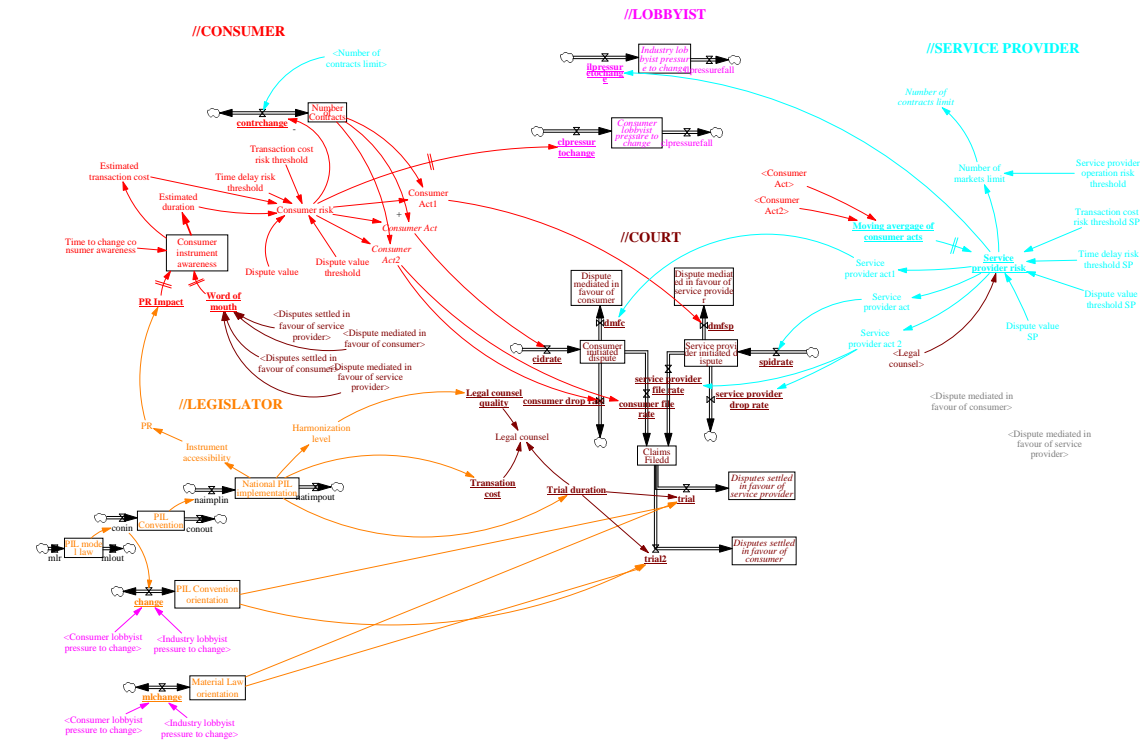
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Causal Loop Diagram

\\Forschung\\Dissertation\\Papers\\Internet_Jurisdiction_SD_Modeling\\Model\\11092804_InternetJurisdictionModel.md



Fri Sep 30, 2011 2:08PM

Figure A.1: Causal Loop Diagram

Appendix B

List of Actors Contacted

Table B.1: List of Actors Contacted

| Stakeholder | Organization |
|---------------------|---|
| Legislature | Bundestag, Germany Federal Office of Justice, Switzerland European Union Council Federal Chamber of Austria |
| Consumer Lobbyist | Der Verbraucherzentrale Bundesverband Konsumentenfragen, Austria Konsumententinfo, Austria Consumer protection, France Federal Consumer Association, Germany Federal Consumer Affairs Bureau FCAB European Consumer Center, Belgium |
| Industrial Lobbyist | Euro Chambers, Belgium BDI - Bundesverband der Deutschen Industrie e.V. ICC World Chambers Federation Chamber of Commerce and Industry, Lugano Swissmem, Zuerich Federation of Austrian Industry |
| Service Provider | DataCore Ctera, Zugernet Softronic Kourtis-solutions Wuala Baker and McKinsey TrendMicro Codastorage.co.uk United Cloud Service Provider Sesamnet GmbH DataTrans Webkeeper |
| Lawyer or Court | Mr. Ernst Schmid(Niederer Kraft and Frey, Zurich) Mr. Christain Oetiker(Vischer AG, Zurich) Mr. Hochstrasser(Baer and Karrer, Zurich) Bezirksgericht, Zuerich Bundesgericht, Lussane Handelsgericht, Zuerich Tamara Frehner |
| Consumer | Students from Department of Informatik and Law from University of Zurich Students from Department of Informatik and Law from University of Bern Students from Department of Informatik and Law from University of Geneva |

Appendix C

Regret Letter from Court

Bezirksgericht Zürich

Gerichtsleitung



Badenerstrasse 90
Postfach
8026 Zürich
Telefon 044 248 21 11

UBZK

Frau
Radhika Garg
Imbisbühlstr. 2
8049 Zürich

Zürich, 19. April 2012

Gesuch um Beantwortung eines Fragenkatalogs

Sehr geehrte Frau Garg

Mit Eingabe vom 6. April 2012 (bei uns eingegangen am 11. April 2012) beschreiben Sie uns den Inhalt Ihrer Masterarbeit und ersuchen uns um Beantwortung eines damit zusammenhängenden Fragenkataloges. Wie ich bereits Ihrem Onkel, Herr Bansal, telefonisch mitgeteilt habe, können wir Ihrem Gesuch aus zweierlei Gründen nicht entsprechen. Zum Einen bewilligen wir Auskunfts-, Akteneinsichts- und ähnliche Gesuche nach konstanter Praxis nur bei Vorliegen eines wissenschaftlichen Interesses, welches voraussetzt, dass der Inhalt unserer Auskünfte im Rahmen einer Fachzeitschrift oder einer wissenschaftlichen Publikation der interessierten Fachöffentlichkeit zugänglich gemacht wird, was beispielsweise bei einer Doktorarbeit der Fall ist, nicht jedoch bei Diplom-, Lizentiats-, Bachelor- sowie Masterarbeiten.

Zum Anderen könnten wir Ihre Fragen aber selbst dann nicht in für Sie nutzbringender Weise beantworten, wenn wir ein wissenschaftliches Interesse bejahen könnten, stellen sich doch die von Ihnen aufgeworfenen Fragen in unserem täglichen Arbeitsumfeld kaum je bzw. jedenfalls nicht in einem quantitativ sinnvoll erfassbaren Umfang. Weder lassen sich die entsprechenden Angaben statistisch eruieren, noch können wir auch nur einigermaßen sinnvolle Prognosen für künftige Verfahren anstellen.

Wir bedauern, Ihnen unter den gegebenen Umständen nicht weiterhelfen zu können.

Mit freundlichen Grüssen

BEZIRKSGERICHT ZÜRICH

Der Leitende Gerichtsschreiber

Appendix D

Transcripts

D.1 Service Provider

D.1.1 Mr. Fatali(Webkeeper, Volketswil)

So the questions are regarding PIL dealing with contracts related to Business provider and Private Consumer. I would also like to ask regarding changes if a short track procedure after Harmonization of PIL is in place. I am interested in knowing your role as a stakeholder in the just mentioned scenario.

What are the factors which effect you majorly in such a situation?

“Our risk is the factor which effect us the most. we do not want higher legal risk.”

How do you evaluate your risk in such a scenario?

“We specify everything in the contract. We do not give much options to the consumers. Everything is fixed in the contract. For example, we state that we provide the best service with the availability of 99.99%. That means, lets say, 10 hours of the downtime is allowed then and that gives us enough space. We do not have to install bigger servers and then the consumers do not even have the right to go to the court.”

How many disputes did you have in last 5 years?

“Actually none. 50% of our clients are private clients. But we did not have any dispute. Only once we had a person who told he would take us to the court. But then we offered them a remuneration and he was satisfied.”

In general what do you prefer to solve a dispute?

“ When we are late at delivering the service, for example, we provide them free usage for a month. And this amount is much less than if we would have to go to the court. This saves our time and cost. We never want to go to our court. This would reduce our

popularity and waste our resources. As we anyways are not dealing with any expensive product/service going to the court is something which is not in our list.”

What factors effect your legal risk?

“ We make the terms and conditions very clear. The services are not guaranteed and that is all matters. We keep our liabilities as low as possible.”

If the awareness of the consumer towards the laws increases how will it effect you risk? Do you see any changes in the scope of business and/or number of contracts in case of national disputes?

“Do not think so. Amount is too small. Even for consumers it is too costly. Imagine 70 CHF vs 2000 CHF.”

D.1.2 Mr. Maurer (Data Trans, Zurich)

So the questions are regarding PIL dealing with contracts related to Business provider and Private Consumer. I would also like to ask regarding changes if a short track procedure after Harmonization of PIL is in place. I am interested in knowing your role as a stakeholder in the just mentioned scenario.

How do you evaluate your risk in such a scenario?

“Well, the risk is only when we do not get payment within time. Because the rest we handle in contract. We literally give no space to the consumer. He can not do much.”

How many disputes did you have in last 5 years?

“Actually none. We had around 250 contracts in last 5 years and no disputes. Some had problems, like some did not like the features we gave them. But that we solve internally. Nobody goes to the court for such a low amount. However, we majorly deal with companies, when we deal with bigger companies we have to accept their terms. But with smaller companies we can negotiate. But when dealing with private consumers its our terms and conditions and they have to accept it”

How does the cross border transaction influence your strategy?

“ We have to be sure which law is applicable, they have to clear. Then we want to reduce our risk as far as possible. We do not want to have liabilities. We make sure with the legal advisor that our liabilities are to bare minimum. Because we do not know whether they did it intentionally or not. we can not bare that. But as I said I do not have much information about the consumer’s contract as we deal with companies basically”

D.2 Consumer Lobbyist

D.2.1 Mrs Gurkmann Jutta (Der Verbraucherzentrale Bundesverband, Germany)

So the questions are regarding PIL dealing with contracts related to Business provider and Private Consumer. I would also like to ask regarding changes if a short track procedure after Harmonization of PIL is in place. I am interested in knowing your role as a stakeholder in the just mentioned scenario.

So how do you decide that there is a problem, which hampers the rights of consumers?

“The consumers complaint to the member organization of ours. They select and give the request to us. Sometimes we also get complaints directly from the consumers. Then we see the law and try to analyze and find out why did the consumer face the problem.”

What are the important factors which you consider while taking measures for consumer protection?

“Whenever we see abuse we take measure so that consumer can be better protected. Though a change in law can take years together but we do small initiatives. There are people who represent us in the parliament and they can raise this issue. In such a process even European Commission is involved. We also do that on the basis of our knowledge and experience. As we have been working on these issues for quite some time now, we know what kind of problem is faced due to which kind of law; so we act appropriately. In the end what matters to us is that the parties whom we represent are protected and we have enough strategic plans to take measures to do that.”

When do you decide to try to bring to change a law?

“There is no specific way of doing that. The more severe the problem is the urgency is to try to solve the problem. For example, if we get 10 complaints we have a democratic voting within our organization and decide which ones are the most important ones and work towards solving them”

How do you decide whether a change in material law is required or in the procedural law?

“We analyze the nature of the problem. We do not favor any change. We make efforts according to the requirement.”

How will the harmonization change the way of work?

“With harmonization in place the approach to go about changing the law would change. Because then we won't be able to go to the national organization as the law would be applicable across the globe. So maybe then we would have to directly approach the European commission, who would then take the request ahead. Because then the national legislation can't do anything.”

Do you think with the harmonization risk of the consumer would change?

“Yeah..I mean that is the whole point. The effort of harmonization has come into existence owing to the fact the consumer is the weaker party. So if the risk does not change i.e. go down I do not think there is any advantage if Harmonization. So of course the risk would go down.

So do you feel that the problems faced by the consumers would decrease?

“Yes some of the problems would go away. However, you never know who the harmonization world looks like. May be there are some new problems. May be the group representing the providers or the industry become active and try to create changes in favor of their parties. So again some new problems would come into picture”

Does your organization also works towards the consumer awareness?

“Yes, we work in coordination to various European Organizations. There is lot of press work done. Also legislations and parliaments do that. There are information campaigns which are organized.

D.3 Industrial Lobbyist

D.3.1 Mr. Vincent Tilmann (Euro Chambers, Belgium)

The questions would be regarding PIL dealing with contracts related to Business provider and Private Consumer. I would also like to ask regarding changes if a short track procedure after Harmonization of PIL is in place. I am interested in knowing your role as a stakeholder in the just mentioned scenario.

So how do you decide that their is problem or a change in law is required?

“Business requires constant change, there might be political reasons to bring about a change in the law. We forward the demand to change to chambers of commerce. To bring about a change in the law we draft a position paper submit it to them.”

What are the major things which might hamper the interest of the service provider?

“Speaking specially of Europe the fact that the consumer is given the right to claim a dispute in its own country of residence makes the business provider very vulnerable. Specially when it is a small company it faces problems even more drastically. This is because even the small sized company is not full of funds. So they cant go on fighting cases, specially in foreign courts. Even the small companies do have legal counsel specially in cases where you talk about services where the price involved in the dispute is very low.”

As you mentioned that there can be lot of ways that a change would be required. So could you tell how you select the most important issues, if at all you do that?

“ If the risk is more if the change is not made, we go for that issue first. However, in general it is more abstract. We do that in conference, we decide our strategy and work accordingly.”

For how many disputes were you approached by the business providers during the last 5 years in the following cases?

“They are so many we cant count”

Which factors are important while evaluating the pressure from the business provider?

“It is like a pyramid. We find what the problems are and as it comes through hierarchy, it has to be implemented.”

In how many cases were you successful in getting the law amended in the desired way out of the total number of initiatives taken by you?

“It is not a simple process. A simple change in law takes years together. So we cant really count that.”

What do you prefer, in general, a change in procedural law or a change in material law?

“It depends on the problem we have. We do not have any preference. We propose to make changes according to the problem we come across”

Once the harmonization is in place, do you see any changes in the degree of pressure which is needed for you to proceed for a change in law?

“Once the harmonization is in place, the laws would be more in favor of consumers. Then we would try to make sure that the laws are at least in balance.”

D.3.2 Mrs. Julia Hoecht (BDI - Bundesverband der Deutschen Industrie e.V.)

The questions would be regarding PIL dealing with contracts related to Business provider and Private Consumer. I would also like to ask regarding changes if a short track procedure after Harmonization of PIL is in place. I am interested in knowing your role as a stakeholder in the just mentioned scenario.

What are the important factors for you in such a scenario?

“Of course the party we represent should be well protected, what kind of problems they face is of prime importance to us. As the consumers are more protected, it means that that adds to the cost of the service provider”

When and how do you feel that the party you represent is not well protected or their rights are not properly used?

“ I will give you an example for this: EU is trying to do this for quiet some time now. They want to protect consumers. Brussels convention is result of that. In such a situation as an industrial lobbyist we try to react and see that our parties do not suffer. This does not mean that we are against the consumer protection. All we want a balance. You see the tendency is towards the consumer protection but they neglect the business needs in framing the laws”

So how do you decide that now there this issue is of major importance and work for it?

“We are in touch with our member organizations. They are in touch with many companies. If our organization sees a problem they talk to the business federation. If the whole branch is having problem. We as the lobbyist try to see where is the exact problem and then try to solve that.”

When is the law actually changed usually?

“ When there is a demand. When there are some new ideas then the law is changed”

What is the impact that harmonization will have on the service providers?

“ Harmonization would increase the risk of the service provider as the laws would be biased towards the consumer. But then we would try and exert pressure, no doubt it would be tougher and more time consuming as the change would have to be done at the international level.”

D.4 Legislator

D.4.1 Mr Paulino Pereira (European Union Council, Belgium)

The questions would be regarding PIL dealing with contracts related to Business provider and Private Consumer. I would also like to ask regarding changes if a short track procedure after Harmonization of PIL is in place. I am interested in knowing your role as a stakeholder in the just mentioned scenario.

In such a scenario what are the important factors for you?

“For us it is important that a balance is maintained and both sides are equally protected. However, we favor the consumers more as they are the weaker party. Brussels is exactly doing the same thing. It is giving rights to the consumers to be protected. As it is said always consumer is the weaker party so brussels give special privileges to the consumers. The consumers are given the right to claim in their own home land, and as consumers do not have a legal counsel at hand and can neither afford one this is a big thing. Now business provider have obligations which they have to fulfill if they want to do cross border transactions.”

When do you decide that a change in the law is required?

“In the parliament you have lawyers, they bring in request. Then you have lobbyist pressure, pressure from political members. All you have to do is get a majority vote in your favor and the law would be changed. However this is not an easy process. It takes time. We make a report, report is revised again and again. The entire process takes a time of 5-7 years.”

So how do you decide whether a change in procedural law is required or a change in material law is required?

“The type of the problem decides that, we do not have a preference for any. We work according to the type of problem it is. Yes, the style of working would be different. But the aim is to solve the problem. So if the problem is in material law, we change that. Otherwise we change the procedural law.”

What are the main reasons for changing a law, generally?

“We need to modernize the law, some provision is not working properly or we want to extend the scope of the current laws. These can be the major reasons when we change the law. Also, when an abuse is reported to us, we take measure to work on the reason which caused the problem”

What are the advantages of Harmonization of PIL, according to you?

“Harmonization of PIL is basically to support the weaker party, but also it will lead to easier cross border transactions. As the laws would be uniform through out, it would make the system less complex”

How will harmonization impact you as a legislation?

“I do not know that yet. But yes, may be the service provider representatives...the lobbyist group would become more active. As they will feel that their parties do not have enough protections. Or may be new problems arise due to harmonization. Changing time and law comes with unpredictable problems”

Do you also take part in PR activities?

“Yes, may be not directly but indirectly. It is a obligation under law to better inform the citizens. For example, it is a mandate from law that service provider should make the contract clear to the consumer. Also it is the work of commission to organize the events and aware the consumers about any change in the law. We have our network organizations which do that for us”

D.4.2 Mrs. Carina Toernblom (European Commission Directorate General for Health Consumers, Brussels)

The questions would be regarding PIL dealing with contracts related to Business provider and Private Consumer. I would also like to ask regarding changes if a short track procedure after Harmonization of PIL is in place. I am interested in knowing your role as a stakeholder who is responsible for the consumer awareness through PR campaigns after a change in the law is made

What is the process you follow while organizing any PR campaign?

“Usually the PR campaigns are organized with country specific requirement. The culture, consumer awareness level varies from country to country and hence everything has to be kept in mind. We usually find out the level of awareness through focus group and

assessment of their knowledge, which tells us how much to invest and how to structure our PR activity. ”

How much does it cost on an average to arrange such a campaign?

“ On an average PR campaigns on consumer right costs 1 Million Euro. We generally work with a collaboration of a local contractor. His responsibility is to convey us the local information. It is very important to understand that the information given will tend to become 0 until it is put in practice. Hence it is very important to not only evaluate the knowledge level, but also iterate the PR activities. ”

What effect would the Harmonization of PIL have on the PR activities, budget wise?

“ Harmonization would definitely make the process easier however would not have a considerable impact on the budget. This is because, if the rules are same the library of rules about which the consumer is to be made aware about would be the same. However, it is still country specific in terms of how it is conducted in each country.”

D.5 Lawyer

D.5.1 Mr. Ernst Schmid (Niederer Kraft and Frey, Zurich)

So we want to know with respect to contract“s between business provider and private consumers.

“So it is not about the disputes among the companies but about the consumers who sues the business provider”

or either way around...my be a business provider sues a consumer.

“but why a business provider sues a consumer”

May be because of non-payment of services within the time frame.

“Showing you a bit my world ...we seldom find cases against consumers because I mean usually the term consumers implies that the stakes are not important..you better see that you are paid than you have to run after the money”

“For example the telephone companies it is their business to see that they are getting paid”

So the question is in the cases which we discussed what are the important factors according to the court?

“I mean you see...you asked about the perception of court...we have laws and its written down the steps in which cases court needs to exercise jurisdiction so actually it is the legislation who says what these factors are”

“What I can say as a plaintiff I have choices so from time to time I have choices where I can say I go to court or I go to arbitration or may be I have choice of various courts, I have choice of jurisdiction etc. I go to United States and they assume jurisdiction because they make bigger awards than Swiss Court”

“Its difficult for me to answer because I am a party”

Ok..then may be with respect to provider you represent what are the important factors. Do you feel the need of simpler laws? For example if you think court of Sweden might have jurisdiction but language is an issue? Do you keep such factors in mind.

“Sure...talking about language if you have a case before swiss court you have to use the language that is spoken...those courts...a state court by definition in canton of Zrich you have to speak German...of course you get an interpreter if you are unable to express yourself in German...but the briefs are to be in German. In that case you have to use German.”

“Also the duration is important topic as a plaintiff would want to finish the cases as fast as possible...and also it is a saying “justice delayed is justice denied”

In a situation where there a harmonization of law is in place...in that case you have uniform law...and then the issue of language is solved...”

“But you have to know that there is hardly an area where we already have a harmonization is in place..at least in europe every country has its own law.. most of the areas are not harmonized”

But, if that is in place..do you think the problems would subside...from your or business providers point of view?

“You know it is a far fetched dream..within our life time that it is harmonized...i mean that there are areas like sale of Goods...the Vienna convention of sales of Goods that applies in many countries but thats rather an exception.”

Do you feel the cost, language problem or the duration involved going down with harmonization?

“I do not think so...the decisive factors of the duration of a case is question of the procedural proceedings of the court organization, of the law that applies to the court and thats the area which is not harmonized...where each country has its own law...in this country we do not have harmonized law...although we have civil code law which applies to whole country but was enacted at start of last year..earlier each canton had its own procedural law.....in Zrich we have commercial court and most of the other cantons do not have that...so the courts canton keeps its own organization to certain limit.”

So harmonization is needed for changes in cost ...

“Yeah...so the code of civil procedure that applies to civil the proceedings that has come to effect on 1 Jan 2011. There are several ways in which the rules are laid down there is main or ordinary court proceedings, then there are summary code proceedings for certain types of action and simplified procedures. So there are 3 types of procedures. The idea

is of course that the small claims are disposed rather swiftly before smaller court before single judge and larger claims are dealt in more complicated way with written briefs there is a differentiation in smaller claims people go and claim orally and the large briefs we have written claims. We say for larger claims you seek legal advice and the lawyer drafts the brief on your behalf”

Order of magnitude of large and small cases

“Until 30,000 CHF(a rough figure) it is smaller claim and after that it is bigger claim. But it is all relative”

When you are representing a provider do you also have an experience in evaluating their legal risk for such contracts which include consumers?

“ Yeah that is part of our advice we have ..we have to evaluate it... it applies both the ways also for the consumers”

What are the factors which you keep in mind while evaluating the risk for business provider?

“As I said it is rather seldom we have a case by the business provider against a consumer because these claims are usually not so high. For e.g. telephone company would deal it internally. What they have is a document which does not let consumers to escape from liability and if they take them to court they have little defense before judge and they have an internal department, not necessary a lawyer, than it does boil down whether a consumer can pay at all.”

What are the factors which you keep in mind while evaluating the risk for consumer?

“If the consumer sues the provider or the manufacturer there can be substantial cost risk, he has to under the new law bear the cost of the court, he has to make the advance court payment which can be lot substantial and if he loses the case then he has to pay indemnity and legal fees of the company. So basically the cost risk. Also, the legal counsel fees.”

Is it a specific ratio between contract value and dispute value?

“We call dispute value as the value he sues for...if he wants to collect for 30,000 this is the dispute value. It will determine the fees the court can ask for. If the case is for million then the court can ask for higher fees. and if you lose the case you have to pay higher fees...between a lawyer and the client they can agree internally”

With respect to harmonization...do you see this cost going down?

“For me it is far fetched...but on the assumption that it is in place...I think we are in Switzerland..we have our own law...The Germans...big neighbors...they sometimes think that they can advise on our own...because they can read the literature...as it is published in German...if we have to say...there can be thousands who can advise on the Unified Swiss German Law...from that perspective yes....would reduce the cost...if there are more advises cost would be less”

Will the cases filed increase, once the harmonization is done?

“Yes..may be..we already have lot of competition here in Zuerich. May be if we have more people advising...may be more cases..i think is more sure is our rates would go down”

Would the harmonization change the awareness of the consumer after the harmonization of PIL. would they be more aware of their rights?

“I think it is more question of the law...whether the law would give more rights to the consumer. What I know is that traditionally Swiss law has been very liberal and very little friendly to the consumer. We didnt have any legislation to protect the consumers before. But it has changed, changed importantly, because we have adopted European legislation. We had at one stage we took over lot of European law, we adopted lot of European law. That was called Swiss Law 2 or 1, may be. It contained lot of consumer protection. If you look at code of civil procedure contains today lot of provision about protection of consumer. Article 40a to 40f contains that if someone comes to your door to sell something then signing a contract has to be there”

Is the legislation biased against or towards the consumer while changing the law?

“Again, it is a reflection of political situation in the country. Even if a country is liberal there are so many provisions for the protection of the consumers. I think it is common consent of the large portion of the community.”

Is the protection very specific to Swiss law?

“When compared to the European Union..we are still..some people say we are behind. In relation to USA if a consumer is having a defected product they are paid so high that other providers make sure that they do not face such an issue.”

Does a legislation also have a bias which one to change procedural law or material law?

“I think its both...they would see both and decide which one has to be changed”

Does one over the other require more effort?

“No..I think it is question of legislation...we have new code of civil procedure...then of course this thing is debated in the parliament then the socialist would stand up and find more consumer protection. The code of obligation....it is mandate from time to time to change then consumer thing would come in”

What is the reason for change in law from time to time? When do they decide that now we would change the law?

“Good question....it is a tough question I do not know if there is a easy answer to that..I mean with the code of civil procedure..each canton has its own law.. we have 26 cantons...it is unbelievable...that each small place has its own court..its a technical need to harmonize the law...and also the believes of people ..of the lawyers there is a development of law....new concepts coming in the law...new rights coming in the law.. from something time to time something happen...”

“In case of Bhopal tragedy...I do not know if something changed in your national law...it would have made tremendous legislation movement here in national law also the lobbyist pushes...and also the political parties have influence...”

“We had a pharmacy and then poison to Rhine river..kms of Rhine river was polluted and the fish died and there were unbelievable picture and then on we have strict legislation on environmental protection”

D.5.2 Mr. Hochstrasser(Baer and Karrer, Zurich)

So the questions are regarding PIL dealing with contracts related to Business provider and Private Consumer. I would also like to ask regarding changes if a short track procedure after Harmonization of PII is in place.

With respect to court what do you see are the important factors for court by which they are effected?

‘Well...what kind of goods are in questions?’

Manufactured Goods as well as services for data services, cloud services and in an international context. In such a scenario what are the factors which are important for court?

“Well usually the provider would try to have court of his own country. So they would try and include in the contract that the dispute would be resolved in their own countrys court. But since these are consumer contracts there are International treaties according to which the consumer can sue in his own country.”

For like courts do they have any preferences in such a scenario? For example in duration, number of cases filed?

“For the courts they have preference not to have any case. They just have to accept whatever comes and easier laws possible”

Easier Law means they are preferred? Right?

“Well the courts have their own procedural codes ..you know...which is state law...which they cannot change. I mean the court of Zuerich has to apply the same procedural code of Switzerland”

But if the harmonization is in place...every court would have the same procedure? So..

“Yeah but that doesnt happen in terms of procedure you would have very different procedures in various countries and there is very little in terms of harmonization”

But if the harmonization is in place would the duration go down?

“No...yeah may be in other countries but not in Switzerland. I believe the procedure in Switzerland is relatively fast. So I believe the procedures here are faster than neighboring countries of Germany, Italy or France.”

Do you see any advantages for Harmonization?

“ There are often advantages for those types of disputes which are of International nature but frankly there is...the only harmonization I see is coming from the European Union who have harmonization to large extent and Switzerland adopts a lot of these laws. Which are called Directives which are implemented in the Swiss Law”

Dont you see any advantages of Harmonization?

“ Well there is an advantage. There are more courts decision which you can look at, to get a better picture of how the courts are likely to decide. The bigger the area, the more cases you have that you could study to determine what the outcome would be. So there are advantages but there are disadvantages also of course in that you know you give up certain traditions of your own legal culture which you might not want to give up and you would have to adapt ..you know it is always the same if your law is of high standards that means you would have to go down and then if your standards are low you would have to go up after harmonization. Now for switzerland we have long tradition of Law and judiciary system that works and we feel that in some area the European law is not that developed as a Swiss Law. You see sometimes in European Union when they try to harmonize the Environmental Law where there are countries which would like to go for higher standards because they are already quiet advanced but then countries like Greece or Portugal they say it is not feasible we cant pay for that so the end result is not what the Scandinavian countries would have wanted so they are not happy about it. So the countries which have imperfect law, which are not good then any harmonization can mean that then you would have better standards. For example, the countries that are better for consumers their are better consumer protections would be ok after harmonization but for other countries it just doesnt work. ”

As you mentioned if their would be better consumer protection after harmonization will the business providers risk would go up?

“Yes, I think you know the consumer protection is always a threat to the business provider. This case when the consumers have the possibility to sue at their home place. So they buy a product and they have a problem with the product that means they can sue in their home court. So for companies to sell the product through Internet then all of a sudden from Switzerland they sell a product in Ireland then they ship the product through DHL or Federal Express and then all of a sudden they get a notice from Dublin saying well their is a law suit here your product is not safe etc. and they have to pay. Because a decision in hat country would be enforceable then. In that sense it would not be advantageous for the business provider but it would be advantageous for the consumer. Thats the whole point about consumer protection. Now you could always say politicians say that consumer protection is good for everybody because then when the producers would be liable to what they sell, and if they produce something which is not safe and you are subject to law suit you will either disappear from the market or improve the quality and that goes in the general interest. That is the general rational, it also means their is equal playground. the same goes for the services the service provider would have to care what they provide in terms of efficiency, availability etc. Because someone can manufacture something in Italy and send it all over of Europe and then if their is a claim he would say I do not care”

Do you see after the harmonization due to increase in the awareness of the consumer the business providers risk would increase, specially because the consumer is well aware now?

“Well for those producers whose products are not safe it is a problem not for others. The only motive for law makers are to make the producers liable about it. They want to make life miserable for those who sell a miserable product or service”

Which are the other factors which contribute towards the legal risk for the provider?

“He would like to keep his liability as small as possible and laws don’t necessarily allow that. So for e.g. to make a simple example the manufacturer would like to keep his liability to minimum for the replacement of a defective product. So you buy something and you ordered it from Germany and you open it here and it doesn’t work then you have the possibility of being liable. Then in law you also have the possibility that you do not immediately realize it, you use the product and then you realize that there is some problem. For example, you buy a washing machine and temperature knob does not work. Instead of 30 degrees it washes all your clothes at 100 degrees and destroys it. It can be thousands of franc. Then you would try to claim this and providers would try to keep this to 0. After the harmonization you would make sure that the providers are liable. But if the harmonization is not there if you are sitting in Switzerland you have that damage and you file something against Portugal provider and there you find out that in the Portuguese law this exclusion of liability is valid then you do not get your money back.”

And with respect to legislation which are the factors which they keep in mind ?

“The law makers would try to make sure that the citizens of their own country are not in disadvantage with respect to citizens of other countries. They would make sure that if their citizens buy something from some country provider then they get the advantage as the citizens from the other countries get. So harmonization just aims at getting the standards across the globe at the same level.”

Do legislation have a preference over changing the material law over procedural law or vice versa?

“Procedural law can almost never be changed. Because that is the local law. My view is that the harmonization is rather at the material law level”

I think even harmonization at procedural law is possible to have the same proceeding across the courts.

“No I do not agree...it is more Material law. Even within the European level there is very little procedural level harmonization”

Do you see the number of disputes rising after the harmonization?

“No I do not think so. It won’t”

Does the service provider have any preference for solving the dispute. For example do they prefer solving it internally over going to the court?

“I think that depends on the country. I think there are countries where there are providers who would want to take it to the court while in some other countries they just do not care. But normally the provider would not initiate the dispute.”

What is the typical duration of such claims?

“A year, but we do not handle the cases lower than 30,000 CHF”

Do you see this duration going down with the harmonization?

“No..I think it would remain very much the same. I think it depends very much on the court. You have different courts, these different courts have different time frame. If the workload is less they would be quicker. The court in Zurich is rather slow. It depends on the efficiency and how efficient the judges are”

Do the legislative bodies do some PR activities in order to better inform the consumer?

“I think it is more of consumer organization which do that. It is called konsumentenforum which would do that. They would make the leaflets etc. They would try to inform the consumer about their right”

What are the main reasons why a legislation would go and make a change in the law?

“I think the legislature would do that when they see an abuse of the market position of particular group of business provider. 30 years ago there were banks offering small loans based on very small procedure. You could see a small ad saying you could apply 5000CHF without any securities you file an application and you get the money. But the interest rates were very very high. 12-15%. So the legislation came up with a law of “kleinkredit”. So they saw that it was not good people who are poor after getting this money spend more than they can afford and then they have to pay more interest rate. So the legislation came up with this.”

So who initiate such a process? And the lobbyist have to do anything with this?

“The members of parliament who are active in the consumers lobby. So lot of this comes lot from the parliament. You have lot of representatives there. And they become active when they see a problem and try to get a law pass. Other examples are health and safety regulations can come from anywhere. For example, one thing which you did not see 40 years ago was you buy a food product and you did not know what was inside it. So you got a marmalade, it is strawberry jam. But, there are lot of other ingredients as well. So people started saying no we want to know what is in their. So the people who have access to the law makers started putting their opinion and asking for change. Other example, when motor cycle helmets had no safety regulations. Now there are regulations about the product that can be used, the kgs impact it should be able to bear, safety label etc. The only people who would have problems in such regulations are the ones who do not produce safe products, and the ones who have a good quality products are not effected as in this way the competition would go down because the cheap products would be out of the market”

Are the laws more biased towards consumer now?

“Yes definitely”

Will this go up with harmonization?

“As I said it would go up in some countries. It depends on the product.”

What is the pressure to the lobbyist when they try to put forward a request to change in a law?

“ When they think that they enough people are effected. The lobbyist in the parliament become active and they drum up support. Its really a matter of convincing. Out of 200 members in the parliament out of which you have to convince 101 to bring a change and bring a law. It is also sometimes a federal department ministry who see a change is required. Lot of consumer protection comes from USA. That is not something what have started from here. Here we do not think like that, we assume that if somebody smokes he is aware of the consequences. But in US they think that people are so stupid that people do not know the harmful effects, so we put a label. So sometimes we adapt the law based on such foreign influences. And that is also how the harmonization comes in place. Sometimes it might take long but sometimes even 2-3 accidents are enough. Also the press plays an important role. If they flame something, they question the law makers etc. So then changes come.”

Will the cost of dispute after Harmonization go down?

“ No I dont think so...it would not have any effect.”

Ok...Thank you Very much..That would be all..

D.5.3 Mr. Christian Oetiker (Vischer AG, Zurich)

The questions are regarding PIL dealing with contracts related to Business provider and Private Consumer. I would also like to ask regarding changes if a short track procedure after Harmonization of PIL is in place. I would like the role and preferences of service provider, court and legislation in such a scenario.

What are the factors which contribute towards the risk of the service provider?

“There are lot of factors which contribute towards the risk of the consumer. But to name a few, in Europe the place where the service provider can be sued is not known. As the consumer would be from any where in Europe and has the right to claim in his home country, this makes the provider very vulnerable. Also which law would be applicable is not known. We may as advisor exclude some possibilities. But we cant reduce it to 0, owing to very uncertain law. When you do not know where you will be sued, it is impossible to limit or reduce the liabilities to 0. Unpredictable law, owing to non harmonization of law, leads to higher providers risk.”

Do you think the harmonization of PIL would have any change on the risk of service provider?

“I think with harmonization of PIL the risk of the service provider would become more predictable. As the laws would be uniform the decision of the court can be predicted.

But that does not mean that the risk would decrease as the laws would be more consumer friendly. Today the situation is different, you do not know which law would be applicable. You file a case in German court and you land up having Polish Law as the applicable law. In the consumer contract, the consumer always has the upper hand”

Do the service provider have any preference in the way the cases are solved?

“The service provider wants to solve any dispute internally. They would not go to court. The services in questions do not involve more that 300 Euro. For such an amount the service provider, would never like to go to the court”

What are the important factors for court in such a scenario?

“ Courts try to make short procedures for short claim value cases. It does not make sense to have them solved in a complex way. However that is very court specific. Also what can be frustrating for court, that their decision wont be applicable to the other country. They would also like to have a proceedings within their own legal system. ”

What are the impacts harmonization would cast on court, once it is in place?

“I think with respect to court the duration would go down, as it would be short track procedure. Also decision given by one court would be applicable across the globe. Procedure would be simpler and more in favor of consumer.”

How does legislation decide that a change in law is required?

“In a parliament you have lawyers, they bring in request. Then you have lobbyist pressure, pressure from political members. All you have to do is get a majority vote in your favor and the law would be changed”

If the consumers awareness increases how will it impact the risk of service provider?

“It does not increase the risk of the service provider. It is just that the consumer would become more strong. But then the contract is always made by the provider, so we can handle this.”

Ok...Thank you Very much..That would be all..