THE IMPACTS OF MIFID II PRODUCT GOVERNANCE REQUIREMENTS ON FINANCIAL INTERMEDIARIES AND A BLOCKCHAIN SOLUTION TO FACE POG REQUIREMENTS

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Abstract

MiFID II (Markets in Financial Instruments Directive) introduces the requirements on product governance to enhance investor protection, by regulating of all stages of the life-cycle of financial products or services and to ensure that firms, which realize and distribute financial instruments or structured deposits, act in the clients' best interest. To reach this scope, MiFID II set out several a set of rules about the creation and distribution of called Product Governance requirements (POG), that impose to financial intermediaries to implement a product approval process for each new financial instrument they are going to create or for significant changes to existent products. By implementing the product approval process, MiFID II redesigns the relationship between intermediaries and clients, internalizing this relationship into the intermediaries' corporate governance processes, because the client's interest has a central role during all life-cycle of financial instruments, from the creation to distribution of financial products. Clients' features

play a fundamental role since the early stage. In fact, financial products have to be designed to satisfy the target market's needs and objectively identified for each product. The implementation of a product approval process has a great impact on corporate governance financial intermediaries because it involves a redefinition of function and assignment of the new tasks. The aim of this paper is to underline the main impacts of MiFID II Product Governance requirements on corporate governance of financial institutions and the necessary efforts to make intermediaries compliant to the new regulatory framework. At the same time, this essay wants to provide an insight into future research on a fintech solution, to let intermediaries face POG requirements. Furthermore, the author, with this food for thought about Blockchain, wants to underline the importance for financial service industry, of paying attention to fintech technologies and their several possible applications to win the challenges of new regulatory frameworks, such as MiFID II, and to survive in the new era of digital finance.

1. INTRODUCTION

The financial crisis has shown that sometimes the application of conduct code of business rules, in the context of the provision of investment services to individual clients, may be insufficient to ensure that firms respect their duty of acting in the best client's interest. So, the European Securities Markets Authority (ESMA), to ensure the investor protection and restore client's confidence in financial markets, has decided to update the regulatory framework, introducing new and more restrictive requirements concerning the topics of: Product governance, inducements, ex-ante and ex-post cost-disclosure, advice service, best execution, transaction reporting and record keeping that are set out in MiFID II Directive, Delegate Directive (EU) 2017/593 and Delegate Regulation (EU) 2017/589.

MiFID II comes into force on 3rd January 2018 and will require financial intermediaries to make significant changes in their internal control system and in the whole corporate governance structure. The first step to understanding the impact of the new regulatory framework and the related implementation costs is to conduct a Gap Analysis that allows identifying gap into the business processes, internal control system and in the procedures set out to manage the relationship with customers. As result of Gap analysis, the top management will have a complete assessment that is necessary to develop an implementation strategy to solve the gap and make the intermediary compliant to the new regulatory framework. The implementation of MiFID II requires compliance procedures to be updated and new compliance monitoring systems be introduced. At the same time, MiFID II mustn't be considered only a compliance's challenge, because it doesn't entail only a noncompliance-risk but has an impact both on each aspect of financial intermediary's business and on risk management's decision making process, involving also the other functions such as: operations, IT, finance department, wealth management and risk management. This

means that MiFID II should be faced involving the whole corporate governance structure, promoting the "risk-culture" from the top to the lowest level of internal control system, as underlined also by James Williams¹ "MiFID II should be treated as an enterprise risk management exercise, led by senior management involving every department".

The focus of this paper concerns Product Governance requirements and its impacts on corporate governance of financial intermediaries, that may be found out analyzing the Articles 16(3) and 24(2) of MiFID II, the articles 9 (referred to manufacturers) and 10 (referred to distributors) of MiFID II Delegate Directive (EU/2017/593) in which they lie in.

Among Product Governance rules, will be analyzed with more emphasis the following topics: the implementation of the product approval process, especially its phase of target market assessment, and the exchange of information flow between manufacturers and distributors. At last, will provide food for thought about MiFID II's implementation cost and will be showed also an insight about a cutting-edge solution to let the exchange of information flows, making them faster safer and less onerous through the Blockchain technology.

2. MIFID II: NOT ONLY A COMPLIANCE CHALLENGE

The aim pursued with the introduction of Product Governance requirements is to ensure that financial intermediaries take into count client's interests and needs during the entire life-cycle of their products and services, from the creation to distribution of financial instruments, to prevent, from an early stage, the risk to detriment client's interest and enhance investor protection. To reach this scope, the new regulatory framework introduces, with some differences between manufacturers and distributors, several rules that cover a wide range of topics, such as the implementation of a product approval process, especially with its phase of target market assessment, and the exchange of information flows between firms that create financial instruments and distributors.

To avoid the risk of miss-selling and the detriment of client's interest, the new regulatory framework, as set out in the Article 16 (3) of MiFID II, requires to manufacturers to implement and review a process for the approval of each new financial instrument and significant adaptations of existing financial instruments before it is marketed or distributed to clients. The product approval process may be broken down in the following phases:

- product design;
- target market assessment;
- · definition of distribution channel;
- product testing:
- periodic review of financial instruments.

¹ William, J. (2017). Compliance considerations ahead of January deadline (Hedgeweek Special Report, May 2017)

However, analyzing each phase and the related impacts on corporate governance of financial intermediaries, is necessary taking into count that they are all interconnected, especially the phase of product design, target market assessment and the definition of distribution channel, that are strictly related, while the last phase of product review, as pointed out in the figure below, depends by the relationship with distributors.

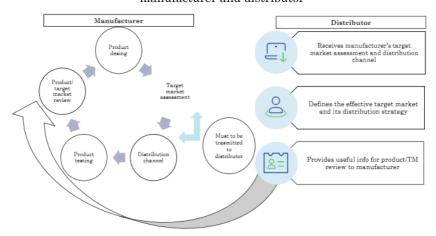


Figure 1. Product approval process and relationship between manufacturer and distributor

Product design is the phase in which the manufacturer has to define the features of financial instruments according to the needs of the cluster of costumers (target market) they want to sell the product. This phase has an impact not only on the departments involved into the structuring of financial products, such as Finance department, or Risk Management, that provides risk estimates and measures about the risk/reward profile of the product and its compatibility with the identified target market, but also on wealth management, that thanks to its strict relationship with customers and its knowledge of clients' needs, provides a lot of useful information to design a product aligned with the objective of the cluster of customers to whom the product is targeted. Furthermore, the product design phase has an impact: on IT department, which makes available both the data gathered into ICT platforms and the exchange of information flows, on operation, that plays the role of PMO defining each function's tasks, and on compliance, that sovereigns the whole product approval process and verifies if the product and the related information documents are compliant to the rules established by the new regulatory framework. The phase of product design is simultaneous to target market assessment, a complex process that involves many functions and it is deeply related with the other topics covered by Product Governance arrangements. especially linked to $_{
m the}$ relationship between

manufacturer and distributors. For this reason, ESMA has decided to develop guidelines that mostly concern the target market assessment, to ensure a uniform application of rules set out in the new regulatory framework. ESMA, in the guidelines on product governance oversight, published on 2nd of June 2017, has laid down five categories, that both manufacturers and distributors have to use to define the positive target market (customers that can buy the product) and negative target market (customers that can't buy the product). In ESMA's view, manufacturers have to define a potential target market using the following categories:

- type of client to whom the product is targeted (retail, professional, counterparty);
- knowledge and experience;
- financial situation with a focus on the ability to bear losses:
- risk tolerance and compatibility of risk/reward profile of the product with the target market;
- clients' objectives and needs.

To fulfill these categories, they can rely on their knowledge of financial markets, instruments and clients features, or sign an agreement with info-providers, to obtain helpful information to assess the potential target market. At the same time, the manufacturers have to identify the best distribution channel for each product considering the complexity of the product itself and the cluster of customers to whom the product is targeted.

After this step, they have to communicate the identified target market and the distribution channel to distributors, that starting by the potential target market defined by manufacturers, have to use the same five categories, set out by ESMA, and their data about customers and sales, which they have as distributors, to proceed with a more granular assessment of the potential target market defining the Effective Target Market. Subsequently, they have to identify the best distribution strategy, to provide the products to each target of clients, taking into count the distribution channel suggested by the firms who have designed the products.

The target market assessment has a great impact on both manufacturer and distributor's IT departments because it requires great IT efforts to gather, store and maintain the big amount of data to fulfill ESMA's categories with the required information. This process should be easier for distributors because they can fulfill ESMA's categories with information collected through the so-called "MiFID Questionnaires" used to profile customers. Instead, manufacturers² can rely mostly on their knowledge of financial markets and products or sign agreement with info-providers, to obtain the necessary information to fulfill ESMA's categories. This means that target market assessment implies both an

channel.

² Manufacturers often haven't a direct contact with customers because they externalize distribution process selling their products through a network of distributors. Furthermore, if they don't provide advice service or portfolio management on individual basis, they don't fall within MiFID II's scope, in this case they aren't obliged to be compliant to POG's requirements, but the mainstream into the industry of the asset management is to cooperate with distributors assessing anyway the potential target market and distribution

assessment of the capacity of MiFID questionnaires3, to gather information about customers, and the implementation of IT solutions. that allow the exchange of information flows between manufacturers and distributors. In fact, by the side of manufactures, they have to implement IT tracks and procedures to transmit to distributors all relevant information about the products they design, especially about target market and distribution channel, but at the same time, they have to implement IT tracks to receive, by distributors, both the information helpful to design products and assess the potential target market and data about sales and reclaims, that are useful for the last step of product approval process: the product review. On the other side, distributors have to implement both IT solutions and database to receive the information about the potential target market and distribution channel by manufacturers, and to store data about reclaims and especially about sales out of the positive target market and within negative target market4, that are helpful for manufacturers' product review. This means that the manufacturer and distributor's product approval processes are "open architectures" because they are interconnected and influence each other. At the same time, this underline that they will to re-evaluate and strengthen their whole IT framework, and invest more resources to update and develop IT technologies to make the data management process less onerous and safer, because it will be a strategic strength point to face MiFID II's challenge and boost own business under the new regulatory framework.

The phase of target market assessment requires great IT efforts, but it involves also finance and wealth management department. In fact, Finance cooperates with business to design the product and assess the target market, according with the information about the client's needs and features provided by wealth management that acts as "infoprovider". At the same time, it involves also risk management that has to verify the match between risk/reward profile of the products and the client's risk attitude. This means that target market assessment implies a synergy between different function and underlines that the implementation of MiFID II must be faced as an enterprise challenge involving each function.

Making a step back along the product approval process, the manufactures, before making available the products to distributors have to proceed with the phase of product testing. Also this phase has an impact on corporate governance of financial intermediaries because manufacturer's risk management department has to make stress test and scenario analysis to avoid the risk of treating financial markets stability or client's confidence in them and the risk of detriment

³ If MiFID II Questionnaires aren't able to catch the information about customers helpful to assess the target market, will be necessary to review the Questionnaires, but this has a great impact on IT and wealth management department because it entails a review of algorithm hidden behind the Questionnaires.

⁴ ESMA in the guidelines on product governance oversight, published on the 2nd of June, allows sales out of positive target market and within negative target market if they are made with the scope of hedging or diversification. At the same time, ESMA clarifies that sales within negative target market have to be reported and justified by distributors to manufacturers, instead for sales out positive target Market, made with the aim of hedging or diversification, there isn't reporting obligation.

customer's interests. This activity requires the best effort to risk management, that is the owner of this phase, but it involves also other function such as compliance, which sovereign the whole process and Operation because it has to define roles and assign tasks to each function during each step of product approval process. The last phase of manufacturer's product approval process is the product review. It depends by the relationship with distributors and requires the best efforts to IT department that has to manage the information flow, storage and make available data about claims and sales, especially about sales within negative target market, provided by distributors. At the same time, it has an impact also on wealth management department and business department, that plays the following roles: verify the match among products, the related target of customers and distribution strategy, and in case of mismatching, set up changes to align them, suggesting also which measures should be adopted to avoid the risk of damage clients' interest enhancing the investor protection. Finally, the phase of product review has an impact on compliance, both because it verifies if the product approval process and financial instruments are compliant to the regulatory framework and because it plays the activity of monitoring and analysis the volume of reclaims received by distributors for each product. Analyzing the impacts of Product requirements on financial intermediaries' corporate governance structure, is necessary keep in mind also the role played by Operation, that define each function's task and deadline during the whole product approval process and write down the measures about product governance describing each step in a policy, that assign the ownership of each activity to the respective function assigning it the related responsibilities.

At this point, should be easy to understand both the impacts of product governance requirements on the whole financial intermediaries' corporate governance structure and why MiFID II, with Products Governance arrangements, redesign the relationship between clients and intermediaries. In fact, giving to clients' interests a central role during all life-cycle of financial instruments, from the creation to distribution and post-trading phase, it internalizes this relationship into the manufacturers and distributors' corporate governance processes. Finally, should be clear also that the implementation of MiFID II isn't only compliance's duty, but it requires the cooperation of each function and for this reason should be faced as enterprise challenge, involving the whole financial intermediary's structure from the top to the lowest level.

3. FOCUS ON TARGET MARKET: PORTFOLIO APPROACH VS. SINGLE PRODUCT APPROACH

ESMA, in the draft of the Q&A about product governance published on the 5th of October 2016 analyze, asking also SMSG's opinion, the strong points and weaknesses of two alternatives approach that may be applied to sell financial instruments: the single product approach and Portfolio approach. Following the first approach, means that a financial

instrument can be sold only if the product, considered "stand-alone", is suitable for the customer. On the contrary, adopting the portfolio approach, a financial product can be sold to customer even though that product, considered stand-alone, isn't suitable for the client, as well the portfolio as whole is still suitable for that customer. Both of these approaches have points of strength and weaknesses. In fact, the single product approach has the positive effect of limiting the cases of miss-selling, because under this approach, would be allowed only sales into the target market but not sales within negative target market. At the same time, it has the negative effect of limiting the portfolio manager's strategy in term of diversification and hedging. On the other side, the portfolio approach has the positive effect to reach a higher grade of diversification or hedging, but it has the negative effect of allowing the miss-selling both out positive target market and within negative target market.

ESMA, in the Q&A published on the 5th of October, underline that the adoption of portfolio approach might entail the risk of reducing investor protection, due to the sales out of positive target market and especially within the negative target market, but at the same time, it understands the importance of not limit the portfolio manager's asset allocation strategies and the related possibility of hedging and diversification. So in the Final report of guidelines on Product governance oversight, published on the 2nd of June, confirm the possibility to adopt a portfolio approach. At a first sight, ESMA's decision could seem in contrast with Product governance requirements and with the aim of enhancing investor protection, but ESMA clarifies that sales out of target market and within negative target market are exceptions and mustn't happen on regular basis. Furthermore, to limit the volume of this type of sales introduces a reporting obligation for sales within negative target market that will have to be reported and motivated by distributors to manufacturers. Finally, ESMA, to ensure this type of sales will not become a best practice, has decided to limit their scope allowing them only when financial intermediaries provide a portfolio management service or advice service adopting a portfolio approach. In this way, ESMA thinks to reach the aim of enhancing investor protection, without prejudicing the portfolio managers' strategy in term of diversification and hedging.

4. PRODUCT GOVERNANCE REQUIREMENTS' SCOPE

MiFID II comes into force on the 3rd of January of 2018 but the Product Governance requirements will be applied not only to each new financial instrument create after the 3rd of January or to existing financial products substantially modified but also to instruments realized before MiFID II introduction and distributed also after this deadline. In this case, manufacturers don't fall within Product governance requirements, so they aren't obliged to assess the potential target market and distribution channel. So, under the new regulatory framework, there are

two cases in which may happen that manufacturers are out of MiFID II's scope:

- when their products have been realized before 3.01.2018 (before MiFID II POG requirements);
- if the manufacturer doesn't belong to European Union.⁵

In these cases, they aren't obliged to define the positive and negative target market, so this task falls into distributors' duties. This means that distributors have to assess the target market even if they don't receive any information by manufacturers. So, they can use only information gathered trough "MiFID II Questionnaires" and each available data such as public information, data they have as distributors and information provided by complementary regulatory frameworks like PRIIPs, and UCITs. For instance, by analyzing KID/KIID⁶, that contains the key information about products, such as instrument's risk/reward profile and time horizon, the distributors can obtain helpful information to fulfill ESMA's categories and identify the cluster of customers to whom the product could be sold. If they aren't able to assess the Target Market, they can't sell the product, but this has a great impact both on distributors' business and indirectly also on manufacturer's business because their products can't be distributed to the mass market. Making a cost-benefits analysis related to MiFID implementation. H manufacturers should realize that if their products weren't sold, they would lose the first source of revenues and fail their business goals. To avoid this risk, they could cooperate with distributors, giving them their assessment of the target market or any helpful information to define it. Analyzing the impacts of Product Governance, comes out the following question: "Will the implementation costs be equally split among manufacturers and distributors? If costs won't be split equally, who will have to support the higher implementation costs?" As up today, we can only say that at the first sight, the higher costs will have to be bear by distributors, because they have to asses target market and distribution strategy also in the cases in which manufacturers don't fall into MiFID II scope, and this means that they have to make a greater effort. Therefore, isn't easy to replace to this question, because we have to keep in mind that distributors could decide to not distribute the products, causing, in this way, a decrease of their sales, but also the loss of the manufacturers' main source of revenues. In light of this, should be clear that

⁵ After Brexit also UK Asset Management firms could fall out MiFID II's scope.

⁶ As set out in PRIIPs Regulation (n. EU/1286/2014), the Key Investor Document (KID), that contains the main features of product, must be written down by manufacturer, that is responsible for the accuracy of information contained into the document. The *packaged retail investment and insurance-based investments* regulation (PRIIPs), that will come into force on the 3rd January of 2018, in according to MiFID II Directive, has the aim to enhance investor protection and market transparency to restore customers' confidence in financial markets. To reach this goal, PRIIPs regulation requires to manufacturers to write down the key investor document to make information about products clearer and easier to understand. The KID must be produced for the following products: OICR, structured deposit, UCITs funds, insurance based investment products (such as unit linked, Index Linked), convertible bonds, derivatives and product issued by SPV. The PRIIPs regulation updates the previous regulation PRIPs, by extending the scope involving also the insurance products and introducing the "Key Investor document" KID, that will replace the "Key Investor Information Document" KIID introduced by the previous regulation. The difference among these documents is in the scope because KIID involve only OICVM instead the KID's scope will include also the insurance-based investment products. The replacement of OICVM KID will take place on January 2019.

Manufacturers, falling out of MiFID II's scope, could avoid implementation costs, but at the same time, they have to make a costbenefit analysis, because if their products will not be sold, they could be obliged to bear a higher cost, represented by the loss of the main source of revenues. As up today, the mainstream among Asset Management industry seems to be oriented towards cooperation with distributors, also when they fall out the scope of Product Governance requirements. So to find out who will bear the higher implementation costs is necessary to make an analysis after MiFID II will have come into force.

5. FUTURE RESEARCH ABOUT BLOCKCHAIN SOLUTION TO FACE MIFID II CHALLENGE

By analyzing the impacts of each phase of product approval process, issues that IT department, providing its services of data gathering, mining and sharing, will play a strategic role, because it let the exchange of information flows and target market assessment, that is essential for the whole product approval process and are the main topics of Product Governance requirements. This means that financial intermediaries will have to re-evaluate and strengthen their whole IT framework and invest more resources to update and develop IT technologies, to make the data management process less onerous and safer, because it will be a strategic strength point to face MiFID II's challenge and boost their business under the new regulatory framework. Obviously, the development of IT architectures is a cost both for manufacturers and for distributors, but it will be essential to realize and distribute financial products when MiFID II comes into force. Financial intermediaries should find a way to make the data gathering and sharing faster, safer and less onerous, but how to reach this goal? Blockchain could be the solution because this technology seems to have the features to satisfy the intermediaries' need for exchanging each other information flows in a safe and fast way. To understand how to apply this technology to let the exchange of information flows is necessary to explain what is a Blockchain and how it works. First of all, Blockchain is a distributed ledger, a database shared among several PCs, called nodes, connected to the same network. In other words, a Distributed Ledger is a database located at the same time on several servers all interconnected and syncronized on the same documents. Thanks to this technology, information is available for each node connected to the network, and data can be shared easier and faster because it takes advantage by the power computing of each device belonging to the network. The assumption for Distributed Ledgers Technology is the building of a big network, made of several nodes, in which each participant is allowed to upload and share data independently by the others but under their control. This means that to share and modify information gathered into a Distributed Ledger is necessary to have the other nodes' consensus.

As up today, there are two different types of ledgers⁷:

- The Unpermissioned Ledgers;
- The Permissioned Ledgers.

The Unpermissioned Ledgers are open, there isn't the main node and can't be controlled by a Central Counterparty. The most popular application of this type of ledger is the Blockchain used to allow Bitcointransaction. The scope of this technology is that each node of the network has a copy of each data approved thanks to the consensus of the majority of nodes, for this reason, the Unpermissioned Ledger can be used as global database for that documents that need to be absolutely unchangeable in time or to be updated with the maximum safety such as property contracts or testaments.

The "Consensus rule", plays a fundamental role into this type of Blockchain, because updates and records don't happen under a Central Counterparty's control, but are created by each node independently, so to ensure the safety of the data management process, is necessary that each "data-record/upload and data-transaction" is verified and allowed by the majority of the nodes belonging to the network. In this way, each node's autonomy is limited by the other nodes' consensus. If the modify is accepted, the Distributed Ledger (database) is updated and each node receives at the same time the latest version of information. Behind this technology there are two processes that let Blockchain work correctly and not lose data during transaction:

- Database replication;
- Duplication.

The first process analyzes the database to identify changes, then it replicates these changes and updates the database. Instead, the Duplication process duplicates data on each database ensuring that each database has the same information.

Differently, the Permissioned ledgers can be controlled and can have an ownership, furthermore, in this type of Blockchain to upload a new record or data, isn' sufficient to obtain the consensus of a limited numbers of nodes, called "Trusted," and not require the consensus of the majority of nodes belonging to the network. In this way, the data transaction is faster but equally safe. This type of Blockchain can be used by Institutions, financial intermediaries and firms that have to manage a relationship with a series of actors such as other firms, suppliers and distributors, because it satisfies the need of sharing at the same time information flows and updated data with different nodes, that operate independently but belong to the same network. The main feature of Permissioned Ledgers is that this type of Blockchain allows establishing rules for accessing and viewing of data recorded on the distributed database. In fact, it deviates from the open Bitcoin paradigm, because it restricts certain roles or access to a club of participants, and the members are differently allowed to inspect the Blockchain database, engage in transaction and operate as a processing node. This means that

"Blockchain4innovation", in his paper "Blockchain, cosa è come funziona e gli ambiti applicativi in Italia".

⁷ The differences between these two type of Blockchain are explainde by Mauro Bellini, director of

Permissioned Ledger introduces a concept of "Governance" and definition of behavioral rules. In other words, it gives the possibility both to share the information with the whole network and to choose which data must be available only for a limited number of nodes, it means that the Permissioned allow selecting the nodes who must receive the information.

Actually, the main application of Blockchain is in payments, in fact, the Distributed Ledger (Unpermissioned Ledger) is mostly related to Bitcoin, because it can serve as a shared, secure, irrevocable and trusted ledger to allow Bitcoin Transaction, but, as underlined also by BCG in the white paper "Thinking outside the box", Blockchain is the disruptive technology for storage, as the PC was for computation and the internet for communication. This technology is the last response to the transformative power of the big exponentials; it can serve for any type of transaction and could be extended beyond financial services, such as supply chain, land registries, health records, micro-transaction and smart contracts among billions of intelligent device worldwide. As up today, in the field of financial services, some financial institutions are working to apply this technology to transaction reporting required by MiFID II, to enhance market transparency and ensure investor protection. In light of this, why not apply the technology of Permission Ledger as a cutting-edge solution to let the exchange of information flows among manufacturers and distributors, required by MiFID II, building a Blockchain in which the nodes are represented by manufacturers and distributors? The idea is that, through this technology, Manufacturers, that have to transmit their target market assessment, distribution strategy and information about his product approval process. could take advantage by the network structure to share at the same time and in a safe and fast way the information required by MiFID II with all their distributors and authorities, that represent the other nodes of the network. The strong points of this solution are:

- the possibility to use a unique IT framework for all distributors instead of different IT architectures (one for each distributor) making the data management process more efficient in terms of time and cost;
- the application of this technology makes the data management process faster and safer and avoid the risk of loose data thanks to cryptography used to record data on Blockchain;
- the possibility of storing information in a safe database with a big storage capacity;
- the possibility of select the information and nodes that have to receive information;
- the possibility of sending simultaneously the latest version of data to the selected distributors that receive at the same time each information:
- the possibility of exchange data in a faster way;
- the implementation cost of a Permissioned Ledger could be split among the nodes of the network.

By the side of distributors, we have to keep in mind that they have to receive the information by manufacturers, but at the same time they have to send to manufacturers their data about the trend of sales such as the sales into positive target market, the volume of reclaims and the cases of miss-selling like the sales within the negative target market. Also in this case, distributors could take advantage of the structure of this type of Blockchain. In fact, thanks to the features of the Permissioned Ledger, using only an IT framework represented by Blockchain, they can receive the latest information they need to sell the products. In other words, thanks to the possibility, provided by Permissioned Ledger, to establish a concept of Governance and behavioral rules, distributors can select both a manufacturer, represented by one of the nodes of the Blockchain and the information they have to send to the related manufacturer. By adopting this solution, distributors would have specular advantages respect to manufacturers' benefits, in fact by the side of distributors, the strong points of this technology are:

- the possibility of storing a big amount of data in a safe database;
- the possibility to use a unique database for all manufacturers in which select the information they have to share with each manufacturer:
- the possibility to use a unique framework, to share data with manufacturers, that means to have to manage a unique IT framework instead of different IT architecture (one for each manufacturer) making the data management process more efficient in terms of time and cost:
- the opportunity to avoid the risk of loose data;
- the opportunity to obtain the latest version of each data at the same time as the other distributors.

In light of this, the adoption of Permission ledgers could seem a cutting-edge solution to reach the goal of making the data management process safer, faster and less onerous and as explained in this essay, the achievement of this goal is strategic to boost the own business when MiFID II comes into force. Actually, we can't say with certain if Blockchain can be immediately applied or if it is the best solution for the exchange of information flows, but analyzing the financial service industry, we can see that the market trend is going towards fintech solution. In fact, a lot of firms are adopting new technologies, provided by start-up, to be competitive in a new "digital-era" and among these "fintech-news" there is also Blockchain. As underlined by BCG consulting, "digital technologies are reshaping the banking industry at an unprecedented rate, generating waves of fresh opportunity and potential peril for traditional banks". The development of digital technologies has increased customers' expectations for greater efficiency, quality, and speed, and it has opened the door to new competitors and disruption". This means that financial intermediaries have to be aware because the competitive arena is changing and that the threats for their business can come from firms that operate in very different fields. An example of this would be Amazon that is thinking to launch their own

Bitcoin and Apple or Google that are developing own platforms for payments. Furthermore, at the same time there is also a growing number of smaller fintech digital platforms such as alternative-payment providers, that are winning customers with new digitally-enabled products and services.

In this scenario, the traditional value chains of banking incumbents show signs of fragmenting. New technologies, such as Blockchain, are evolving as potentially fundamental elements of the emerging new industry structure called industry stacks8. So in conclusion of this paper, I would underline the importance for financial services industry to pay attention to fintech technologies and their several possible applications to win the challenges of new regulatory frameworks such as MiFID II and to survive in the new era of digital finance.

6. CONCLUSION

The aim of this paper is to demonstrate that the implementation of MiFID II regulatory framework isn't only a compliance issue, but it should be faced as an enterprise challenge, involving the whole financial intermediaries structure, from the top to the lowest level, because MiFID II requirements have an impact on each function of financial intermediaries' corporate governance, and require the cooperation of each department.

At the same time, this paper underlines that with the introduction of product governance requirements, MiFID II redesign the relationship between clients and intermediaries. In fact, giving to clients' interests a central role during all life-cycle of financial instruments, from the creation to distribution and post-trading phase, internalizes this into the manufacturers and distributors' corporate relationship governance processes. This is one of the most important news introduced by MiFID II, because, for the first time, client's interest is the leading element during financial product structuring process and this marks a great step ahead towards the enhancing of investor protection pursued by European Financial Authorities, During the text, I have also underlined that could be some cases in which manufacturers couldn't fall within MiFID II's scope, avoiding in this way the implementation cost related to the new regulatory framework, but at the same time, they have to keep in mind that distributors could be not able to sell their products and this means that they would lose their first source of revenues failing their business goals. This underlines the importance of cost-benefit analysis because the cost represented by the loss of the main source of their revenues could be higher than benefits.

At last, by analyzing the impacts of each phase of product approval process, issues that IT department, providing its services of data gathering, mining and sharing, will play a strategic role, because it let

⁸ Brackert, T., Gotteberg, G., Evans, P., & Damm, J. (2016). *Will industry stacks be the new blueprint for banking?* (Boston Consulting Paper). Retrieved from https://www.bcg.com/it-it/publications/2016/will-industry-stacks-be-the-new-blueprint-for-banking.aspx

the exchange of information flows and target market assessment, that is essential for the whole product approval process and are the main topics of product governance requirements. This means that financial intermediaries will have to re-evaluate and strengthen their whole IT framework and invest more resources to update and develop IT technologies, to make the data management process less onerous and safer, because it will be a strategic strength point to face MiFID II's challenge and boost their business under the new regulatory framework. Obviously, the development of IT architectures is a cost both for manufacturers and for distributors but it will be essential to realize and distribute financial products when MiFID II comes into force. In light of this, it's easy to understand that for financial intermediaries, finding a way to make the data gathering and sharing faster, safer and less onerous becomes vital. In the previous paragraph, is provided food for tough about the fintech solution represented by Blockchain to reach this goal, because I think that this technology could have the features to satisfy the intermediaries' need of exchanging each other information flows in a safe and fast way. Actually, we can't say with certainty if Blockchain can be immediately applied or if it is the best solution for the exchange of information flows, but, at the same time, we should keep in mind that one of the main features of Blockchain technology is transparency, guaranteed by the possibility to record each data transaction in an unchangeable way thanks to cryptography. This feature is so important because transparency is the scope pursued by financial authorities, to restore investors' confidence in financial markets with the introduction of MiFID II regulatory framework and PRIIPs Regulation, and it represents the 'trait d'union' among these complementary regulatory frameworks.

In light of this, the adoption of Permission Ledger Blockchain could seem not only a cutting-edge solution to reach the strategic goal of making the data management process safer, faster and less onerous, but also the instrument to improve market transparency, signing the transition from a trust economy to a transparency economy.

So in conclusion of this paper, the author wishes to underline the importance for financial service industry to pay attention to fintech technologies and their several possible applications, to win the challenges of new regulatory frameworks, such as MiFID II, and to survive in the new era of digital finance. At the same time, the author wants to underline the importance for financial Authorities of adopting a Permission Ledger Blockchain as a possible solution to improve market transparency, and reach their goal to restore investors' confidence in financial markets, reducing information asymmetry and signing an epochal transition to transparency economy, that is essential for investor protection.

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