

Win-Win  
Fixing ADR with Cardano

Matthias Sieber  
University of Southern California  
Gould School of Law

August 17, 2021

# Contents

- 1 Introduction 3**
  - 1.1 A Primer on Mediation . . . . . 3
  
- 2 Issues 4**
  - 2.1 Trust of Credentials . . . . . 4
  - 2.2 Payment . . . . . 5
    - 2.2.1 Payment guarantees and bias . . . . . 5
    - 2.2.2 Refunds . . . . . 5
  - 2.3 Mediation process slow to start . . . . . 5
  - 2.4 Unethical behavior to get business . . . . . 6
  
- 3 Solutions 7**
  - 3.1 Certifying Mediators on Cardano . . . . . 7
    - 3.1.1 Atala PRISM for identity . . . . . 7
    - 3.1.2 Universities and ADR Programs verify credentials . . . . . 8
  - 3.2 Smart Contracts handle payments and refunds . . . . . 8
    - 3.2.1 Fee to Win-Win . . . . . 9
  - 3.3 Simple UX to get problem-solving faster . . . . . 9
  - 3.4 The marketplace works for mediators . . . . . 11
  
- 4 Future Work 12**
  
- 5 Conclusion 12**
  - 5.1 COI Statement . . . . . 13

# 1 Introduction

Win-Win is a decentralized dispute resolution platform and marketplace built on the Cardano blockchain. It allows disputing parties to find a suitable mediator to help resolve their conflict in a timely and cost-effective manner outside the court system. The marketplace enables mediators to focus on the mediation process without having to engage in often questionable business boosting practices; cases flow to mediators for a small percentage of their mediation fee.

## 1.1 A Primer on Mediation

Mediation is an alternative dispute resolution<sup>1</sup> process that allows disputing parties to come up with their resolution that ideally satisfies the interests of all parties. It is “a process in which an impartial third party acts as a catalyst to help others constructively address and perhaps resolve a dispute, plan a transaction, or define the contours of a relationship” [MMPLKSM05, p. 266]. A mediator, usually a neutral third party with no prior connection to any of the parties, controls the process of the mediation, but not the outcome. Ultimately, mediation allows for parties to collaboratively solve their dispute. This is in stark contrast to litigation, where parties are becoming increasingly entrenched throughout the process as adversaries.

Mediation within communities and the workplace have become common. Depending on the type of case and jurisdiction, parties may be required to

---

<sup>1</sup>commonly abbreviated as ADR

seek mediation prior to being permitted into the court room. As mediation has an extremely high success rate in the upper ninety percent range, many cases never make it into litigation.

Mediation avoids the difficulties of time and monetary cost of judicial proceedings or formal litigation [AS21, p. 11].

As the term mediator is not protected, anyone can claim to be a mediator. However, a skilled mediator has commonly gone through an extensive training program. Certified mediators on Win-Win have advanced degrees in Conflict Resolution or Law in addition to having graduated from effective mediation training programs. Some mediations may also require special subject matter expertise. Most importantly, mediators are great listeners. Parties will be heard — something that the court system cannot guarantee.

## **2 Issues**

The field of alternative dispute resolution (i.e. mediation, arbitration and the like) suffers from several substantial challenges. These issues prevent the industry from growing as fast as it conceivably could.

### **2.1 Trust of Credentials**

Membership to a mediator's association is not an indicator of skill as these organizations are incentivized to accept anyone into their group. Furthermore, a false claim of credentials (e.g. advanced degrees, awards, positions in organizations, number and outcomes of mediated cases) cannot be easily

verified by a party searching for a mediator in the existing system.

## **2.2 Payment**

### **2.2.1 Payment guarantees and bias**

On the grounds of bias, a dispute resolution specialist (e.g. mediator) should not have knowledge of the details of payment status in order to fulfil their duty [Gan08]. While mediators typically require payment prior to the mediation, even well-established and experienced mediators may experience difficulties receiving payment.

### **2.2.2 Refunds**

The payment of a mediator is not dependent on the outcome of a mediation. However, if a mediator cancels the mediation prior to its start, then parties should be refunded immediately. This scenario may occur if the mediator has to cancel the mediation due to an emergency, if a conflict of interest is discovered between the time of accepting the case and the start of the mediation, or if other unforeseen circumstances prevent the mediation from taking place. In such an event, parties should immediately get their full refund. The existing system does not allow for this.

## **2.3 Mediation process slow to start**

Even if all disputing parties have agreed to mediate their conflict, the parties still have to put in time and effort to get a mediator to take and schedule

their mediation.

The process always involves contacting individual mediators one-by-one. Even when using a directory — such as the Southern California Mediator Association’s mediator directory — the process is time consuming and frustrating. These directories are not suited for a party to determine the fit for their individual case. Fees, availability, and sometimes even subject matter expertise is hidden from the parties that actively seek aid in solving their dispute.

Once all parties agree to use a specific mediator, everybody involved still has to find the date and time that work for all parties (including the mediator).

Some prolific mediators are booked out months or even years in advance. Time is usually not a resource that disputing parties have on their side.

## **2.4 Unethical behavior to get business**

Due to the market conditions, mediators are often required to go out and find clients on their own — this is especially true to new graduates from ADR programs. This situation leads to some potentially bias-forming — and thus very questionable — social media interactions with people that may end up becoming the mediator’s clients.

## 3 Solutions

All the above mentioned issues can not only be solved by utilizing the Cardano blockchain in combination with traditional web technologies, but improve the experience of getting to the mediation for mediators and parties alike. Indeed, as people still process the social changes that COVID-19 brought, ADR experts are convinced that “[T]echnology will continue to play a larger and larger role in alternative dispute resolution, and more and more dispute resolution will occur online” [Mar21, p. 40].

### 3.1 Certifying Mediators on Cardano

For parties to have trust in selecting and ultimately telling a mediator about their conflict, Win-Win uses the Cardano blockchain to verify the identity and the credentials of the mediator.

The Negotiation, Conflict Resolution, and Peacebuilding department at California State University Dominguez-Hills has committed to certifying their alumni and graduates that are fit to be mediators.

#### 3.1.1 Atala PRISM for identity

IOHK’s Atala PRISM has been piloted in Georgia and will further be rolled out in Ethiopia for credentials verification. Similarly, Win-Win will use Atala PRISM to have mediators verify their identity.

### **3.1.2 Universities and ADR Programs verify credentials**

Decentralized Identifiers are controlled by individuals (e.g. mediators), organizations (e.g. University departments and ADR programs), and machines. Since Atala PRISM is using the W3C DID standard, the credential issuing organization (e.g. a University) is considered the DID controller, the representation of the DID document can be seen as the degree or certificate, and the DID subject is the mediator, who graduated from the program.

## **3.2 Smart Contracts handle payments and refunds**

Smart contracts will enable efficient handling of payments and refunds in ADA.

Once all parties have made their deposit into the smart contract, the mediation can start at the arranged time.

A party can cancel the mediation prior the arranged start time. Depending on the time to the scheduled start time of the mediation, this may incur a penalty fee. Also, if a mediator cancels or does not show up, a refund may be initiated.

The biggest benefit is apparent in the normal case where parties make their deposit and the mediation takes place. Since the details of the payments are hidden from the mediator, no bias based on payment information is formed, potentially resulting in a fairer process.



### **3.2.1 Fee to Win-Win**

To continue operating and building out Win-Win, a single-digit percentage fee will be taken from the mediator's fee for their mediated cases. This fee will be determined after concluding additional user research and prior to launching on mainnet.

## **3.3 Simple UX to get problem-solving faster**

Instead of presenting a list of mediators, Win-Win asks a party the what, when, and how much.

With the base parameters set, the party will then be presented with up to 10 suitable mediators. The party is prompted to select and rank their top five choices. Then, the party can invite their counter-party (or counter-parties) via email functionality to make their ranked choice of the five mediators.

The top choice is going to be notified of the mediation request and has twelve hours to accept the request before anybody else has the option to do so. Once the twelve hours are up or the mediator denies the request, a notification gets sent to the parties' second choice with a six hour period until the next choice gets notified. The time period is reduced for the remaining choices to two hours each.

Unless there is a conflict of interest or other ethical concerns, a mediator is expected to mediate a case if the schedule and time allows for it — which will be the case if the mediator shows up in the selection screen.

## Find a Mediator

**what**

**when**

**price**

**SEARCH**

**start over**

Figure 1: Find a Mediator

Acceptance and response rates are factored into making recommendations for a party's selection of suitable mediators.

### **3.4 The marketplace works for mediators**

Mediators on Win-Win do not need to engage in (often neutrality-compromising) client-seeking behavior as the marketplace finds suitable cases for them.

Mediators that want to utilize Win-Win to have cases flow to them provide:

- legal name
- email
- rate
- specialties
- availability (as it changes)
- fluent and literate in which languages
- ADA wallet address
- credentials (to be verified through Atala PRISM with the issuing organization)

Basic information may be augmented by a standardized intake interview for mediators that showcase the mediator's experience and/or personal take on alternative dispute resolution.

## 4 Future Work

Win-Win is initially focused on the US market serving primarily the English-speaking population. Plans to expand to all of North America with the inclusion of the most common languages are present for post-launch.

The inclusion of payment gateways is another critical step for mass adoption.

Other areas of future work includes, but is not limited to:

- UX improvements
- Execution of video-assisted mediation on platform
- Integration of court-mandated mediation
- Arbitration
- Support localized marketplaces by providing documentation, training, easier access (e.g. SDKs) to the platform
- Integration into social good and government services
- Mobile apps

## 5 Conclusion

With the addition of smart contracts, Cardano is ripe for true social disruption and *making the world work better for all.*<sup>2</sup>

---

<sup>2</sup>slogan used on <https://cardano.org>

Alternative dispute resolution, such as mediation, allows for not only solving disputes in a cost-effective, more efficient manner than the alternative (i.e. litigation), it also allows for disputing parties to come to an understanding. The restorative qualities of mediation has a ripple effect into the greater community. As people learn to see interests beyond positions, people's minds transform and see how we are all connected.

The ADR field has not yet made the transition into the 21<sup>st</sup> century in terms of using technology. Thus, the combination of ADR and the 3<sup>rd</sup> generation blockchain Cardano has the potential for growth in both areas.

Win-Win, as outlined in simple terms in this paper, allows more people to access ADR and solve their disputes with the trust of the Cardano blockchain. This is a win for technology and a win for humanity.

## **5.1 COI Statement**

Ben Hart (MLabs) is a mentor to the author. The author is a part-time intern at MLabs and has contributed in a small capacity to Liqwid.

Furthermore, the author has made his appreciation for Lars Brünjes (Director of Education at IOHK) known publicly, especially as it relates to the Plutus Pioneers Program, where the author was an active member of the first cohort.

## References

- [AS21] Jeffrey Allen and Malcolm Sher. Mediation: An Introduction. 2021.
- [Gan08] KS Gans. Don't bite the hand that feeds you: Arbitrator bias based on payment information. *Transnational Dispute Management (TDM)*, 5(4), 2008.
- [Mar21] Emily Martin. The Rise of Online Mediation: Lessons from the E-Commerce Marketplace. 2021.
- [MMPLKSM05] Carrie J Menkel-Meadow, Lela Porter-Love, Andrea Kupfer-Schneider, and Michael Moffitt. *Dispute resolution: Beyond the adversarial model*. Aspen Publishers, 2005.