Q: Who is more negatively impacted by the current system of paper receipts: the merchant or the customer, and why?

**Short answer:** Merchants bear the greater, day-to-day burden, because every transaction forces them to absorb real costs and reputational risks. Customers suffer too, but their pain is intermittent and usually limited to moments when a receipt is lost or unreadable.

**Merchant pain points:**

| **Cost / Risk** | **Why it matters** |
| --- | --- |
| **Hardware & supplies** | Thermal printers, paper rolls, spare parts, and service contracts create a perpetual expense line—one that scales with transaction volume. |
| **Maintenance & downtime** | Jammed printers or empty rolls stall checkout lines, frustrate shoppers, and require staff intervention. |
| **Labor & training** | Employees spend time changing rolls, troubleshooting errors, and learning new POS workflows instead of serving customers. |
| **Environmental & ESG impact** | Non-recyclable thermal paper undercuts sustainability goals and can invite criticism from eco-conscious consumers. |
| **Fraud & returns** | Counterfeit or altered receipts expose the business to “return fraud,” directly hitting margins. |
| **Customer-service liability** | When shoppers misplace receipts, they blame the store; staff must hunt through POS logs or deny the return—either way, brand sentiment drops. |

**Customer pain points:**

| **Issue** | **Why it matters** |
| --- | --- |
| **Fragility** | Thermal ink fades, paper tears, and pockets eat receipts long before a return window closes. |
| **Stress** | Lost proof of purchase can trigger panic, especially for big-ticket items or warranty claims. |
| **Clutter & admin** | Shoppers must store, sort, scan, or photograph receipts for taxes, expenses, or warranties—an annoying extra chore. |

**Why merchants feel the sting more**

1. **Persistent cost vs. occasional annoyance** – Customers deal with receipts only when something goes wrong; merchants pay for them 24 × 7.
2. **Reputational exposure** – A single bad return experience can damage brand loyalty; customers can simply shop elsewhere.
3. **Scalability of loss** – Every additional sale prints another receipt, magnifying hardware, paper, and environmental costs.

**The digital-receipt (NFT) alternative**

* **Zero paper, zero hardware** – Eliminates printers, rolls, and maintenance contracts.
* **Immutable proof** – Receipts minted as NFTs can’t fade or be forged, slashing fraud and return disputes.
* **Instant retrieval** – Customers pull a QR code from their wallet; staff scan it and move on, cutting queue times.
* **Eco-friendly halo** – Reducing paper waste aligns with corporate sustainability goals and modern consumer values.

**Bottom line**

* Both parties benefit from ditching paper, but merchants have the most to gain—and the most to lose if they stick with the status quo.