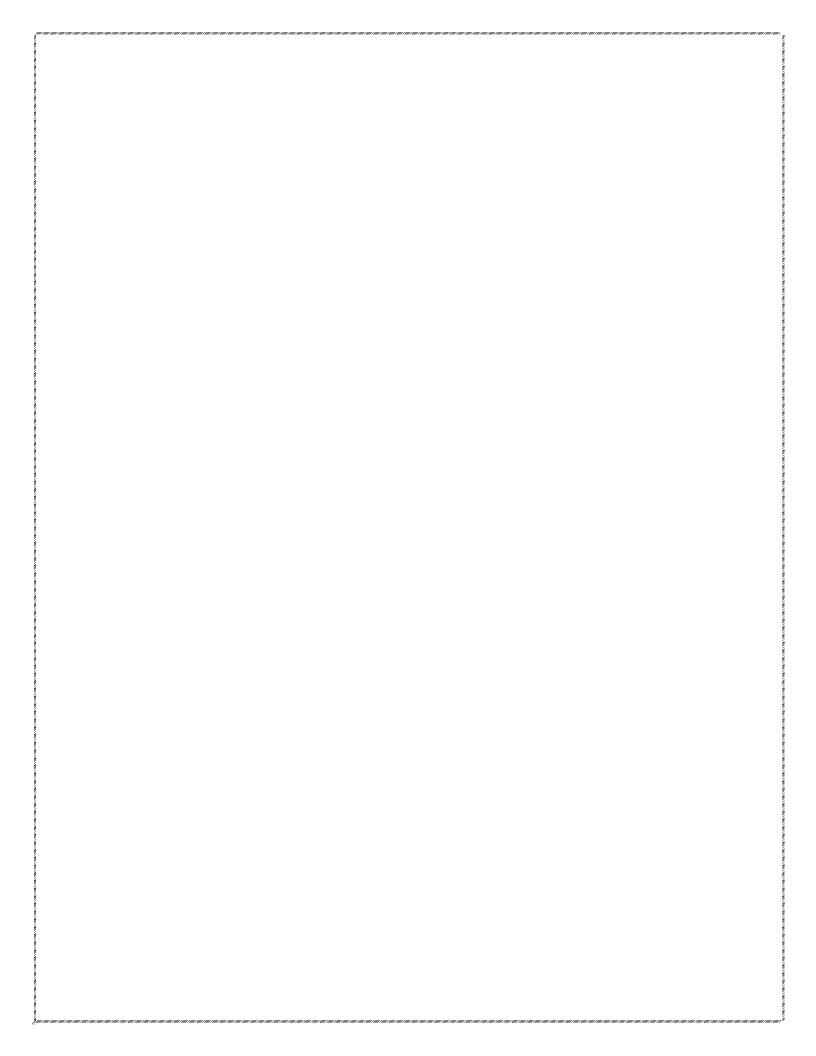


Quarterly Payment System Report
Q4, 2021
(October–December)

Department of Payment and Settlement Systems.



PREFACE

We are delighted to share the **quarter 4,2021** report. The report highlights the outlook of digital payment channels – in terms of volume, value, usage, and users observed in the fourth quarter (October 2021 – December 2021). The report also shows the performance in comparison to the previous quarter same year (Q3, 2021).

For easy reference, the report has been categorized as -

- 1) Domestic payment transactions
- 2) Regional payment transactions and
- 3)International payment transactions.

We would like to thank all our contributors for submitting the reports on time.

PAYMENT TRANSACTIONS AT A GLANCE (Q4, 2021)

VOLUME & VALUE OF DOMESTIC PAYMENT TRANSACTIONS –2021 Q4 IN FOCUS



Mobile & Internet Banking

33.01 million transactions amounting to Nu. 105.43 billion

Both volume and value 1



QR Code Payments

13.32 million transactions amounting to

Nu. 12.63 billion
Both volume and value



Wallets

1.05 million transactions amounting to

Nu. 368.18 million

Both volume and value



Domestic Payment Gateway

831.88 thousand transactions amounting to

Nu. **264.71** million

Volume 1 Value

VOLUME & VALUE OF DOMESTIC PAYMENT TRANSACTIONS -2021 Q4 IN FOCUS



Electronic Fund Transfer

68.42 thousand transactions amounting to

Nu. 35.87 billion
Both volume and value



Card – ATM & POS

0.82 million transactions amounting to

Nu. 3.44 billion
Both volume and value



Cheque

113.99 thousand transactions amounting to

Nu. **40.48** billion
Both volume and value

CROSS - BORDER PAYMENT TRANSACTIONS – 2021 Q4 IN FOCUS



Acquirer

208 Transactions amounting to INR 0.49 million Both volume and value



Issuer

3.46 thousand
Transactions amounting to
INR 12.60 million
Both volume and value



SWIFT

9,276 Transactions
Both volume and value



International Payment Gateway

1,018 Transactions amounting to Nu. 2.08 million

Volume

Volume Value

SUMMARY

The payment transactions in Table 1 reports the total transactions made through various digital payment channels operated by the RMA and the 6 banks at domestic, regional (India), and international (COTI) level from October to December 2021. It also shows the comparison of these transactions with the third quarter same year and fourth quarter, 2021.

Further, the report also includes transaction of an additional bank- Digital Kidu which offers all digital banking services and commenced its operations from February 2021.

Table 1: Payment Transaction Comparison – Q3 and Q4, 2021.

	Q3, 2021		Q4, 2021		% Change	
Instrument	Volume (in thousand)	Value (in million)	Volume (in thousand)	Value (in million)	Volume (in thousand)	Value (in million)
Paper-Cheques	120.36	77,162.41	113.99	40,481.22	-5.30%	-47.54%
Mobile & Internet Banking	31,484.06	93,061.54	33,015.54	105,439.93	4.86%	13.30%
QR Code Payments	10,644.47	9,992.93	13,327.42	12,633.08	25.21%	26.42%
Payment Gateway	745.46	524.77	831.8830	264.71	11.59%	-49.56%
Wallets	667.75	243.34	1,055.36	368.18	58.05%	51.30%
Electronic Fund Transfer	63.40	21,281.07	68.42	35,870.00	7.92%	68.55%
ATM	945.52	3,720.94	823.68	3,436.78	-12.89%	-7.64%
PoS	0.38	1.65	0.29	1.66	-22.40%	0.62%
Domestic Payments	44,671.38	205,988.65	49,236.57	198,495.56	10.22%	-3.64%
RuPay ATM & PoS -Acquiring	0.37	1.47	0.20800	0.4934000	-43.94%	-66.52%
RuPay ATM & PoS -Issuing	1.80	7.35	3.46	12.60	92.92%	71.45%
Regional Payments	2.17	8.83	3.67	13.10	69.48%	48.41%
SWIFT -Inflow	8.42	76.48	9.2760	87.09	10.13%	13.87%
SWIFT -Outflow		149.55		215.38		44.01%
International Payment Gateway (IPG)	2.1980	0.69	1.0180	2.08	-53.69%	201.44%
Intenational Payments	10.62	226.73	10.2940	304.55	-3.08%	34.32%

As compared to the third quarter:

- Domestic payments saw an overall increase of 10.22% by volume and a decrease of 3.64% by value.
- Regional payments saw an overall increase of 69.48% by volume and 48.41% by value.
- International payments saw an overall decrease of 3.08% by volume and an increase of 34.32% by value.

Domestic Payments

Domestic payments recorded a total of **49.23 million** transactions comprising of intra and interbank domestic transactions worth **Nu.198.49 billion** during the 4th quarter, 2021. There is an increase of 10.22% by volume and a decrease of 3.64% by value compared to the third quarter.

Domestic Payments by Value Domestic Payments by Volume Q4, 2021 Q4, 2021 1.73% Paper-Cheques Paper-Cheques 20.39% 18.07% Mobile & Internet Banking 0.19% Mobile & Internet Banking 1.69% QR Code OR Code 0.13% Payment Gateway 27.07% Payment Gateway 6.36% ■ Wallets Wallets ■ Electronic Fund Transfer ■ Electronic Fund Transfer 67.05% ■ ATM ■ ATM ■ PoS ■ PoS

Pie chart 1: Domestic Payment Transaction - Q4, 2021.

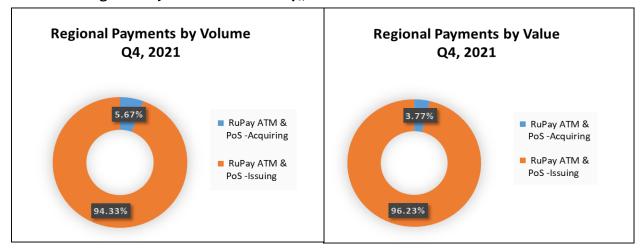
As compared to the third quarter, the increase in volume is contributed by an increase in the usage of mobile and internet banking, QR code payments, wallets, electronic fund transfer and payment gateway for online sites. On the other hand, the decrease in value is mainly due to the decrease in the usage of paper cheques by 47.54% amounting to Nu. 36.68 billion.

In the Q4, mobile and internet banking dominated the domestic payment space followed by QR code payment in terms of volume and in terms of value, Mobile and internet banking followed by paper cheques and electronic fund transfer.

Regional Payments

Regional payments include RuPay card transactions through the ATM and PoS terminal in India and Bhutan. During the 4th quarter, a total of **3,671** Regional payments of **Nu. 13.10 million** were transacted of which 4.72% constitutes acquiring transactions and 95.28% Issuing transactions.

Pie chart 2: Regional Payment Transaction - Q4, 2021.

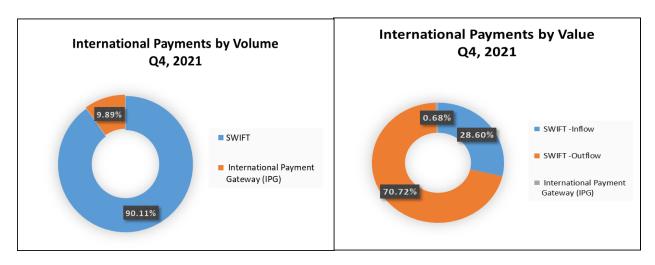


International Payments

International payments contain the SWIFT and International Payment Gateway (IPG) transactions made from the banks. During the 4th quarter 2021, international payments recorded **10,294** transactions of value **304.55 million**. There is a decrease of 3.08% by volume and an increase of 34.32% by value as compared to the previous quarter.

The IPG recorded **1,018** transactions amounting to Nu. **2.08** million while the SWIFT recorded a total of **9,276** transactions.

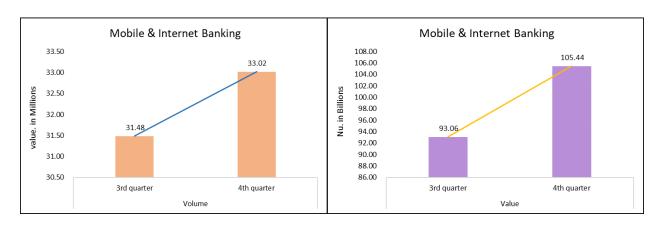
Pie chart 3: International Payment Transaction - Q4, 2021.



DOMESTIC PAYMENT TRANSACTIONS (Q4, 2021)

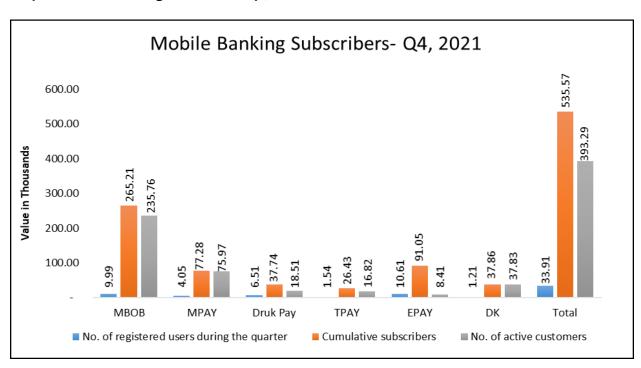
a) Mobile and Internet Banking

Graph 1: Mobile and Internet Banking Transaction (Volume & Value -Q3 and Q4,2021)



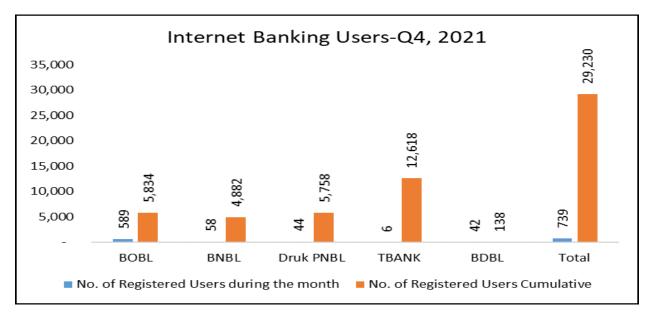
During the 4th quarter 2021, **33.02 million** transactions worth **Nu. 105.43 billion** were processed using the banks mobile banking app and internet banking. When compared to the third quarter, it is an increase of 4.86% and 13.30% by volume and value respectively. The average value of per transaction increased from **Nu.2,956** per transaction in 3^{rd} quarter to **Nu.3,193** per transaction in 4^{th} quarter.

Graph 2: Mobile Banking Subscribers -Q4,2021



From October to December 2021, **33.91 thousand** new users subscribed to use the mobile banking apps making the total number of mobile banking subscribers to **535,569** as of reporting date. Out of the total, 73.43 percent are recorded to be active users. The detailed bank wise subscription during the 4th quarter, 2021 are shown above in the graph 2.

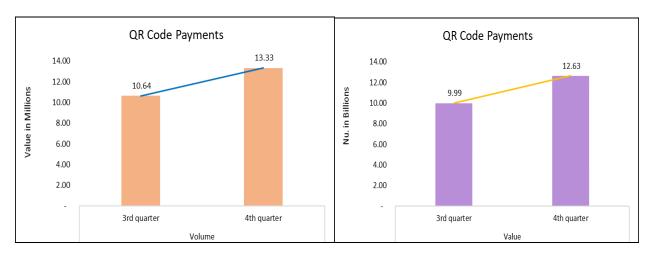
Graph 3: Internet Banking Subscribers -Q4,2021



For internet banking, 739 new users have subscribed during the fourth quarter taking the total internet banking users to 29,230.

b) Mobile Banking – QR Code Payments

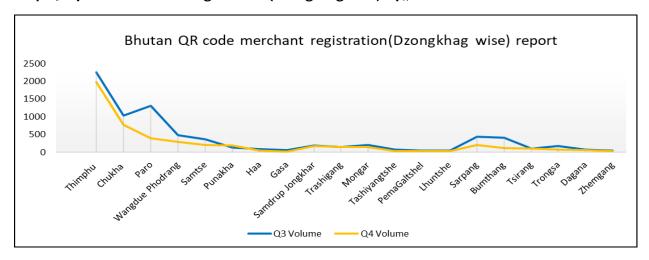
Graph 4: QR Code Payments (Volume & Value -Q3 and Q4,2021)



QR code payments saw a total of **13.33 million** transactions of value **12.63 billion** as of the 4th quarter 2021, equivalent to 40.37% of the mobile banking transactions in terms of volume and 11.98% in terms of value. The transactions have increased by 25.21% by volume and 26.42% by value when compared to the previous quarter.

The increase is because of the launch of Bhutan QR by the RMA in July 2021 which enables interoperable use of common codes issued by member banks. Since then, QR scan code has been gaining popularity in shops, restaurants, cafes and even in the taxis as they are contactless, touchless, and easy to use. Bhutan OR code has further helped during this pandemic as it limits in person transactions making it less likely for the virus to spread to others through cash exchanges.

Graph 5: QR Code Merchant registration (Dzongkhag wise) -Q4,2021



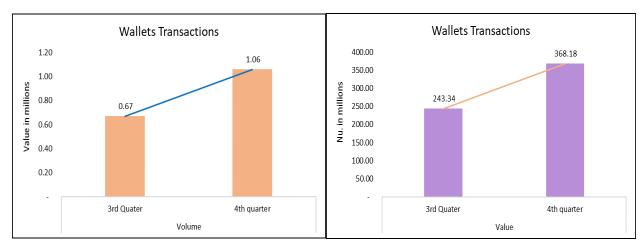
As of 4th quarter, the banks have onboarded **5,019** new QR code merchants taking the total QR issued till now to **40,029** which is an increase of **12.71**% compared to the previous quarter. The Bhutan QR code registration has increased in Punakha and Tsirang Dzongkhags compared to the previous quarter. However, there is a drop in all other Dzongkhag during this quarter. The highest issuance is still in Thimphu Dzongkhag as shown above in the graph **5**, owing to the maximum merchant base.

c) Wallets

Bank of Bhutan Limited launched a digital wallet called goBoB coninciding with the 66th birth anniversary of our Fourth King Jigme Singye Wangchuck.

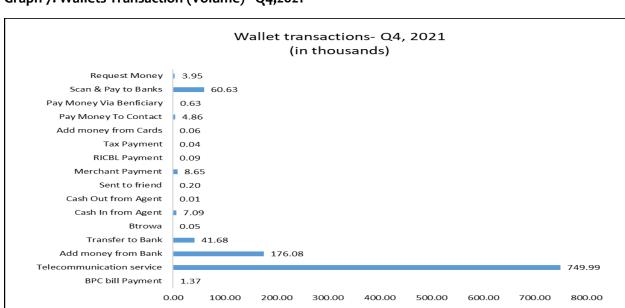
Thus, as of fourth quarter, the banks have onboarded 10 merchants for Bngul, 58,235 merchants for eteeru and 71,945 gobob users.

The fourth quarter wallets transaction comprises of Bngul, eteeru and gobob.



Graph 6: Wallets Transaction (Volume & Value -Q3 and Q4,2021)

A total of **1.06 million** transactions worth **Nu. 368.18** million were transacted through the wallets during the 4th quarter 2021. Wallet transactions have significantly increased by 58.04% and 51.30% by volume and value respectively as compared to the previous quarter. The significant increase was seen in telecommunication services, add money from banks and scan and pay to Banks and as shown below in the graph 7.



Graph 7: Wallets Transaction (Volume) - Q4,2021

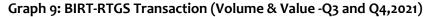
d) Electronic Fund Transfer – BIRT Fund Transfer System

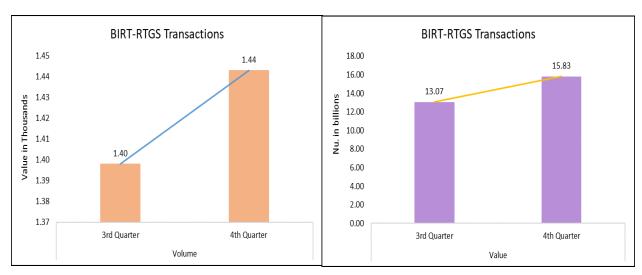
A nationwide electronic fund transfer system known as Global Interchange for Financial Transaction (GIFT) has been renamed as Bhutan Interbank Real-time Fund Transfer System (BIRT).

During 4th quarter, there were **68,415** transactions amounting to **Nu. 35.87 billion**. Thus, the total BIRT transactions in the 4th quarter 2021 have increased by 7.92% by volume and 68.55% by value as compared to the previous quarter. There were maximum transactions received in the BULK settlement both in terms of volume and value as shown below.

BIRT Transactions - Q4, 2021 70.00 25.00 63.82 60.00 19.44 20.00 50.00 15.83 15.00 40.00 30.00 10.00 20.00 5.00 10.00 1.44 3.15 0.60 RTGS BITS BULK Value in billions Volume in thousands

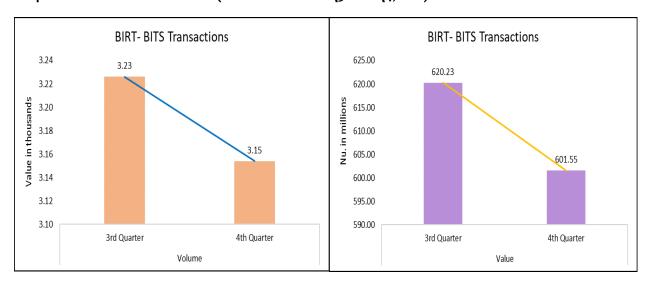
Graph 8: BIRT Transaction (Volume & Value -Q4,2021)





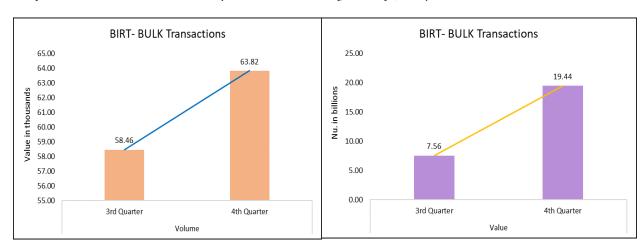
BIRT RTGS allows real time fund transfer above Nu. 1m. During the 4th quarter 2021, 1,443 transactions worth Nu.15.83 billion were transacted which is an increase in the volume by 3.22% and 21.10% by value as compared to the previous quarter.

Graph 10: BIRT-BITS Transaction (Volume & Value -Q3 and Q4,2021)



BIRT BITS permits the users to transfer funds below Nu. 1m in the batch settlement (10 transactions in a batch) in every 30 minutes. There are 3,154 transaction worth Nu. 601.55 million transacted in the 4th quarter 2021. There is a decrease of 2.23% by volume 3.01% by value as compared to the previous quarter.

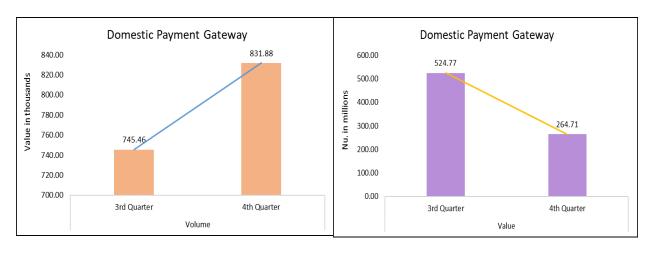
Graph 11: BIRT-BULK Transaction (Volume & Value -Q3 and Q4,2021)



Likewise, **BIRT BULK** allows single debit and multiple credits for the users. In 4th quarter 2021, there are **63,818** BULK transactions amounting to **Nu.19.44 billion**. It is an increase both in terms of volume and value by 9.16% and 157.09% respectively as compared to the previous quarter.

e) Domestic Payment Gateway

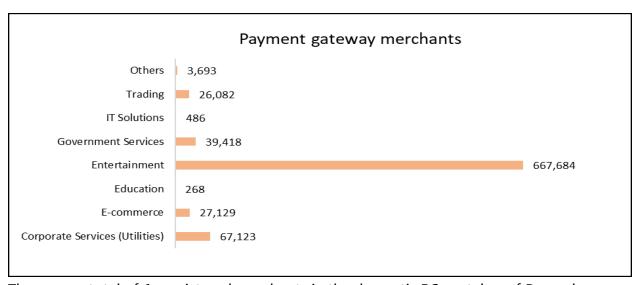
Graph 12: Payment Gateway Transaction (Volume & Value -Q3 and Q4,2021)



Domestic Payment gateway is a merchant service provided by RMA for the direct payment processing for e-commerce, government services and corporate utilities. During this quarter, 831,883 transactions amounting to Nu.264.71 million were transacted. In terms of quarter-to-quarter growth, there is an increase of 11.59% by volume, but decrease of 49.56% by value.

The highest domestic PG transactions in the fourth quarter was recorded in the entertainment category followed by e-corporate utilities services category and government services -G2C Payment aggregator.

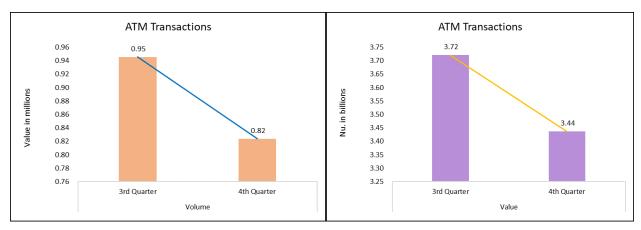
Graph 13: Domestic PG Users -Q4,2021



There are a total of **65** registered merchants in the domestic PG portal as of December 2021, out of which 50 are active while 15 are dormant this year.

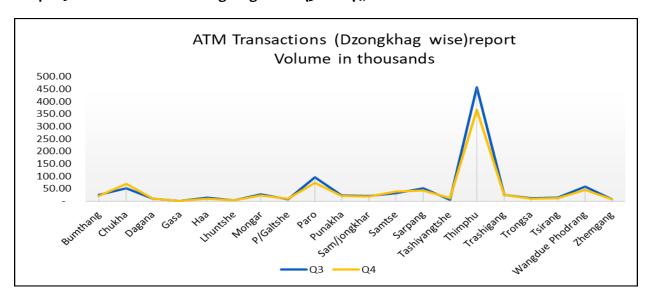
f) Cards – ATM & PoS

Graph 14: ATM Transaction (Volume & Value -Q3 and Q4,2021)



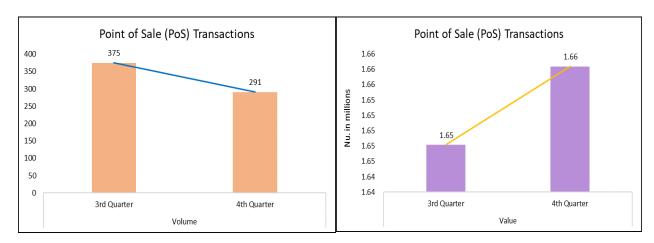
The cards payments refer to cash withdrawal/transactions from ATM and PoS terminals in the country using domestic ATM cards. In 4th quarter 2021, a total of **0.82 million** transactions worth **Nu.3.44 billion** were transacted. Unlike other payment instrument, we are observing decreasing trend for card payments every quarter. In terms of volume, there is a decrease by 12.89% and in terms of value, there is a decrease by 7.63% as compared to the previous quarter.

Graph 15: ATM Transaction Dzongkhag Wise -Q3 and Q4, 2021



In the 4th quarter 2021, there is a decline in ATM transactions in all the Dzongkhags except Chukha, Samtse and Tashiyangtshe as compared to the previous quarter. The maximum domestic withdrawal is still in Thimphu Dzongkhag, followed by Paro and Chukha Dzongkhag.

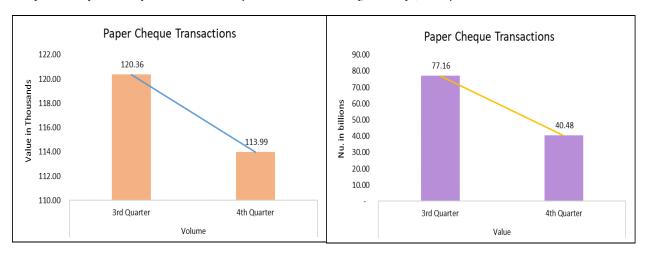
Graph 16: PoS Transaction (Volume & Value -Q3 and Q4, 2021)



The domestic PoS transactions have recorded only **291** transactions of value **Nu.1.66 million** during the fourth quarter. It was a decreased by 22.40% in terms of volume. However, there was an increase of 0.62% by value as compared to the previous quarter.

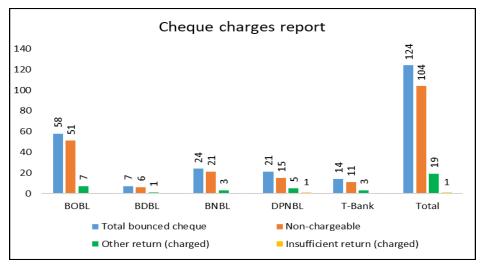
g) Paper Cheque

Graph 17: Paper Cheque Transaction (Volume & Value -Q3 and Q4, 2021)



Cheque payments are still observed to be used for making large value payments in the country. A total of 113,985 cheques worth Nu. 40.48 billion was recorded in the 4th quarter 2021. It is a decrease of 5.30% by volume and 47.54% by value as compared to the previous quarter.

Graph 18: Bounced cheque report -Q3 and Q4, 2021



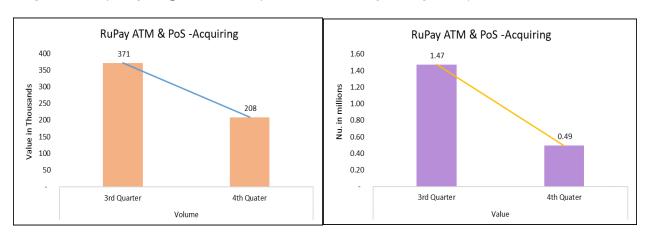
During the quarter, a total of 124 cheques were bounced out of which, 1 cheque was charged to the customer for their insufficient balance and 19 cheques were charged to the banks for their failure to do

the due diligence. The maximum number of cheques were returned because of invalid account number, cheque belonging to different account, endorsement missing, drawers sign different, etc. RMA has instituted to charge Nu.300 plus 10% of the cheque value for the insufficient balance to stop cheque returned due to insufficient balance and associated illicit activities around it and Nu.100 to the banks for failure to do their due diligence.

REGIONAL DIGITAL PAYMENT TRANSACTIONS (Q4,2021)

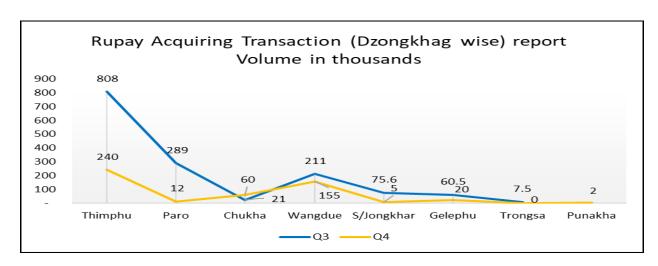
a) RuPay Acquiring

Graph 19: RuPay Acquiring Transaction (Volume & Value -Q3 and Q4, 2021)



RuPay Acquiring allows Indian nationals to withdraw cash and make payment through all the ATM and PoS terminal in Bhutan. During 4th quarter 2021, it has recorded **208** transactions worth **Nu. 0.49 million**, a decrease of 43.94% by volume and 66.52% by value compared to the previous quarter.

Graph 20: RuPay Acquiring Transaction Value (Dzongkhag wise) -Q3 and Q4, 2021



There is a sharp decline in the RuPay ATM acquiring with the withdrawal drop in Thimphu, Paro, Wangdue Phodrang and Samdrup Jongkhar dzongkhags in this quarter compared to the previous quarter. The maximum withdrawal is still in Thimphu Dzongkhag.

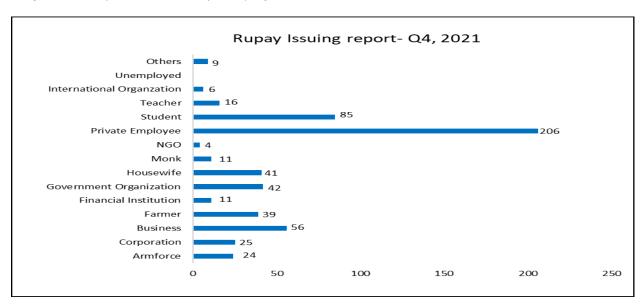
b) RuPay Issuing

RuPay Issuing launched in November 2020, allows Bhutanese nationals to withdraw cash and make payment through all the ATM and PoS terminal in India. Currently Bhutan National Bank Ltd. is the only issuing bank in Bhutan.

RuPay ATM & PoS -Issuing RuPay ATM & PoS -Issuing 4.00 14.00 12.60 3.46 3.50 12.00 3.00 10.00 2.50 7.35 8.00 1.80 2.00 6.00 1.50 4.00 1.00 2.00 0.50 3rd Quarter 4th Quater 3rd Quarter 4th Quater Volume Value

Graph 21: RuPay Issuing Transaction (Volume & Value -Q3 and Q4, 2021)

In the 3^{rd} quarter, there is **3,463** transactions worth **Rs.12.60 million**. Therefore, there is a drastic increase of 92.92% by volume and 71.45% by value compared to the previous quarter.



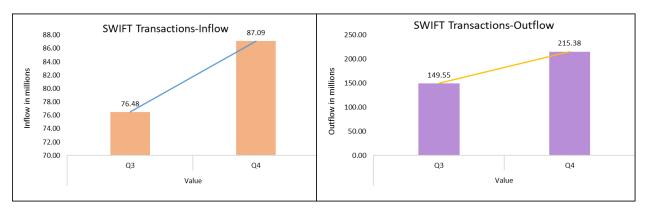
Graph 22: RuPay Card Issuance (BNBL) -Q4,2021

As of December 2021, total of **3,493** cards were issued of which **575 cards** were issued in this quarter. The highest issuance was to the private employees followed by students and business.

INTERNATIONAL DIGITAL PAYMENT TRANSACTIONS (Q4,2021)

a) SWIFT Transactions through the banks

Graph 23: Member Bank SWIFT Transaction (Volume & Value -Q3,2021)



In this quarter, the SWIFT inflow transactions have increased by 13.87% and SWIFT outflow transactions by 44.01% as compared to previous quarter in terms of transaction value.

In terms of the transaction volume, the SWIFT transaction has increased by 10.13% as compared to previous quarter.

The top three currencies transacted in the member bank SWIFT system during this quarter are USD, Japanese Yen (JYP) and Australian Dollar.

b) International Payment Gateway (IPG)

The International Payment Gateway (IPG) is a platform to acquire card payment made in USD and INR. There was a total of **1,018** transactions of value \$23,477.57 and INR 2.05 million transacted in the fourth quarter this year.

IPG Transactions IPG Transactions 2.50 2.50 2.20 2.08 2.00 2.00 Value in millions Value in Thousands 1.50 1.50 1.02 1.00 1.00 0.69 0.50 0.00 0.00

Graph 24: IPG Transaction (Volume & Value -Q3 and Q4,2021

3rd Quarter

Volume

During the fourth quarter, there were a total of 25 merchants registered in the International Payment Gateway Platform. IPG transactions saw a decrease of 53.69% by volume and an increase of 201.44% by value as compared to the previous quarter.

3rd Quarter

Value

4th Quarter

4th Quarter

The volume of the USD transactions has decreased significantly both in terms of volume and value by 58.50% and 63.81% respectively. In terms of INR, both the volume and value has increased by 50.52% and 228.02% respectively as compared to the previous quarter.

Under the USD, the maximum transactions both in terms of volume and value are acquired by Samuh and Druk Netware. While the highest number of INR transactions processed in the IPG are Wangchuk Hotel and Le Meridien Hotel in Thimphu in terms of volume.