

PERFORMANCE PARAMETER OF MOBILE NUMBER PORTABILITY

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ABSTRACT: Mobile Number portability (MNP) is an ability of changing the operator without changing the number. This scheme provides freedom and convenience to customer to get best services. Here MNP is analyzed by Matlab tool. A survey is done on the basis of billing, customer care, service and make a comparison between them. After Survey it is found that network coverage is main parameter responsible for MNP.

KEY WORDS : MNP, MATLAB, Services.

1. Introduction

Today, the use of fixed number portability as well as mobile number portability is already widespread. The Croatian Post and Electronic Comm. Agency implemented the central administrative database of ported numbers (CADB) in June 2005. The fixed number portability was then initiated, while mobile number portability started in October 2006. From that moment on, users were able to choose the optimal operator for themselves in accordance with their needs and habits. Thus, if a user uses a services of one operator and decides to switch to another network, it can be done easily while retaining the same number. The Ordinance on number portability adopted by The Croatian Post and Electronic Communications Agency (HAKOM) stipulates the procedures of porting, as well as the obligations of operators on the same occasion. [1] Operators must allow users to keep the same number and area code (for mobile network operators), regardless of the network to which they switch.

1. MNP Parameters

There are several MNP parameter on which customer wants to change operator

2.1 Billing

There are some points due to which subscribers change their network operator services for example, a business man who is worried about his bill because if he makes large no of calls in a day and per call cost is larger than he opts for the operator whose call rates are low.

2.2 IDD Services

The IDD service means International Direct Dialling. The nation's number one integrated communications service provider announced its reduced International Direct Dialling (IDD)charges for its valuable customers throughout the nation. IDD services provide connectivity to the highest number of countries whilst having direct communication routes to more than 225 destinations.

2.3 Convenience Of Bundled Services

As technology blurs the lines that once divided providers of voice, data and video services, communications companies are responding with attractive offers that "bundle" a variety of services into a unified package with, in most cases, substantial savings over the cost of ordering the same services individually or from different suppliers.

. 2.4 3G Services

3G Services means speed does matter. Most of the larger telecom companies have spent big fortune on winning crucial next generation 3G airwaves. The new 3G technology will ensure fast-paced internet connection at broadband speed even while on a move. Most of the telecome operators are gearing up for a quick roll-out of these premium services in February. Those geeky subscribers who are addicted to mobile internet might do well to wait a bit until the third generations services are up for the grabs. Once rolled-out, compare the service and make your decisive move.

2.5 Customer Care Services

Once you're able to access network coverage, quality of the service provided by the Telco is of utmost importance. Its service aspect includes state-of-the-art service centre with advanced customer care department designed to provide superior customer management services. While the telecom-industry is growing at a rapid pace it becomes significant to determine whether the service provider has ample call centers to deal with customer complaints and resolve their problems during recent years the importance of providing the highest level of customer care has grown significantly. Organisations now realise that effective customer service is the key to obtaining a competitive edge and increased efficiency. Most major surveys undertaken in recent years point to customer care as being a primary factor in customer retention and business expansion.

2.6 Value Added Services / Better Offers

Mobile value added services are innovative set of mobile applications serving beyond basic voice and messaging services. These include high-end services such as entertainment (chats, video downloads, ring-back tones), gaming, multimedia content delivery and conferencing services to name a few.

2.7 Network Coverage

In telecommunications, particularly in radio, signal strength refers to the magnitude of the electric field at a reference point that is a significant distance from the transmitting antenna. It may also be referred to as received signal level or field strength. Typically, it is expressed in voltage per length or signal power received by a reference antenna. High-powered transmissions, such as those used in broadcasting, are expressed in dB-millivolts per metre (dBmV/m). For very low-power systems, such as mobile phones, signal strength is usually expressed in dB-microvolts per metre (dBµV/m) or in decibels above a reference level of one milliwatt (dBm). In broadcasting terminology, 1 mV/m is 1000 µV/m or 60 dBµ (often written dBu).

2.8 Subscription Plan Price/Tariff Plan

No points for guessing what the fuss was all about in the telecom industry for last couple of years. It was regarding ultra-competitive tariff rates. Each telecom

operator was trying to pip other in terms of introducing 1 second plan to ½ second plan and even fraction-of-a-second plan. Needless to say, tariff plans offered by your current mobile operator should be comparable to the ones prevailing in the market, if not lower. The days of monopoly in the wireless segment are way behind us. Make every rupee count. However, if the difference in tariff structure is negligible, better stick with enhanced value-added service being provided by your operator.

2.9 Auto Roaming

Operator sends information to each roaming subscriber who is visiting the coverage area of a particular MSC. Each subscriber wants minimum call charges at the time of roaming. The operator that offers maximum flexibility in their roaming plans will be able to attract maximum number of subscriber with the help of mobile number portability technique. For example a person has business in two states than for the business purpose he visit both states and the roaming rate of his operator is high than he go for new operator who has minimum call charges at the time of roaming.

3 MNP Survey Report

3.1 Subscriber satisfied with their present operator

Survey report indicates that main parameter network coverage due which subscriber change the operator & given by 31.5% and least parameter is bundle of services & given by 4% Survey report on the basis of different parameter is shown in Table 1. & fig 1.

PARAMETERS	SATISFIED	%age
Billing	15	7.5
Auto –roaming	18	9
IDD Service	12	6
Network coverage	63	31.5
Customer care	23	11.5
3G service	12	6
Better offer/promotion	18	9
Bundle of service	8	4
Tariff plan	21	11.5

Table 1
Subscriber satisfied with their present operator parameters

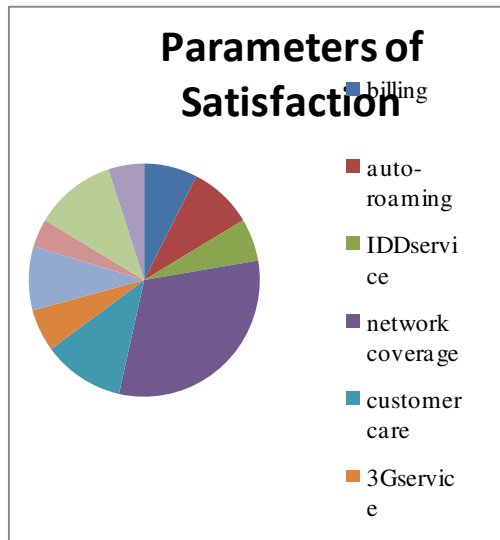


Figure 1 Subscriber satisfied with their present operator parameters

3.2 Subscriber dissatisfied with their present operator

Survey report indicates that main parameter network coverage due which subscriber change the operator & given by 32% and least parameter is bundle of services & given by 2% Survey report on the basis of different parameter is shown in Table 2.

PARAMETERS	NOT SATISFIED	%age
Billing	4	8
Auto –roaming	5	10
IDD Service	3	6
Network coverage	16	32
Customer care	5	10
3G service	2	4
Better offer/promotion	5	10
Bundled services	1	2
Tariff plan	5	10
Others	4	8

Table 2 :Subscribers not satisfied with their present operator parameters

2. Comparative Analysis Of MNP Parameter

Comparative analysis between network coverage , tariff & MNP is shown in fig2, fig3, & fig.4 respectively

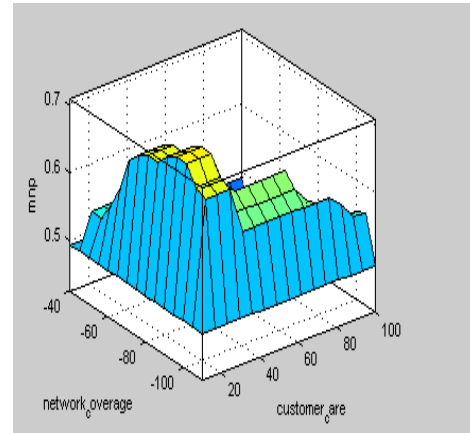


Figure 2 Graph between network coverage, customer care and MNP

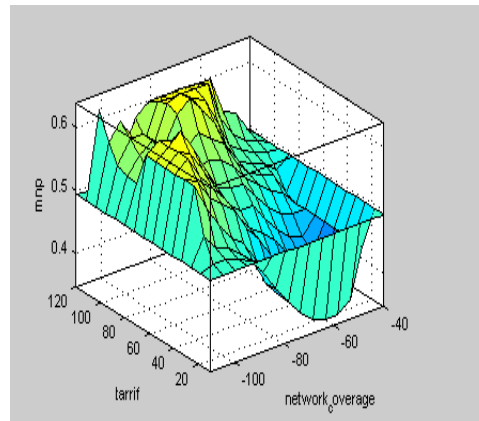


Figure 3 Graph between network coverage, tariff and MNP

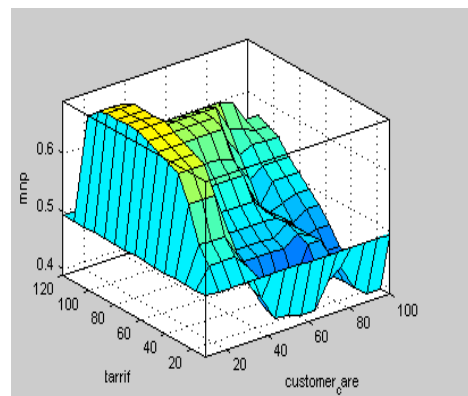


Figure 4 Graph between Customer Care, tariff and MNP

3. Conclusion

After survey & analyzed by Matlab Tool it is conclude that Network coverage is main factor responsible for MNP.

References

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