

COLLECTION DATA USING NEW TOOL TO SATISFY SPECIFICATIONS

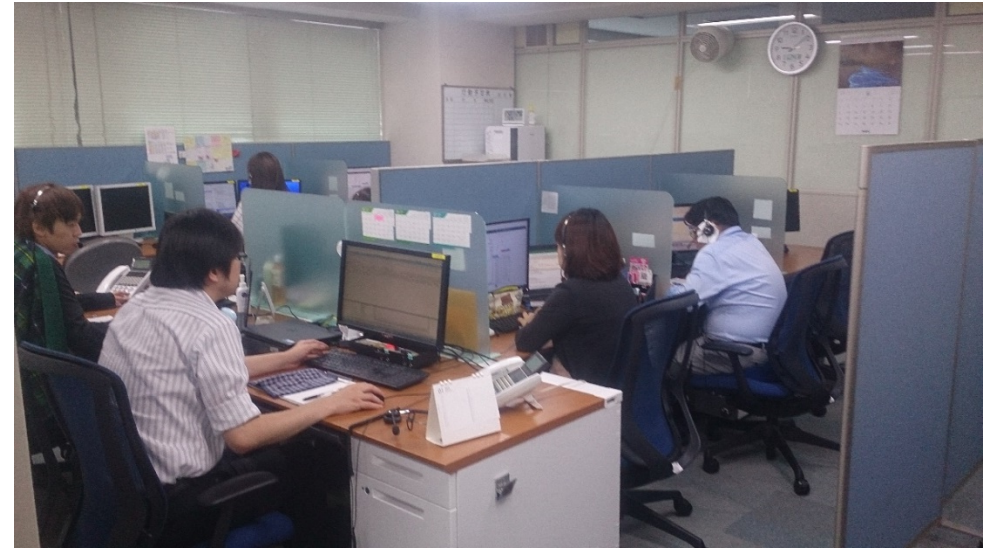
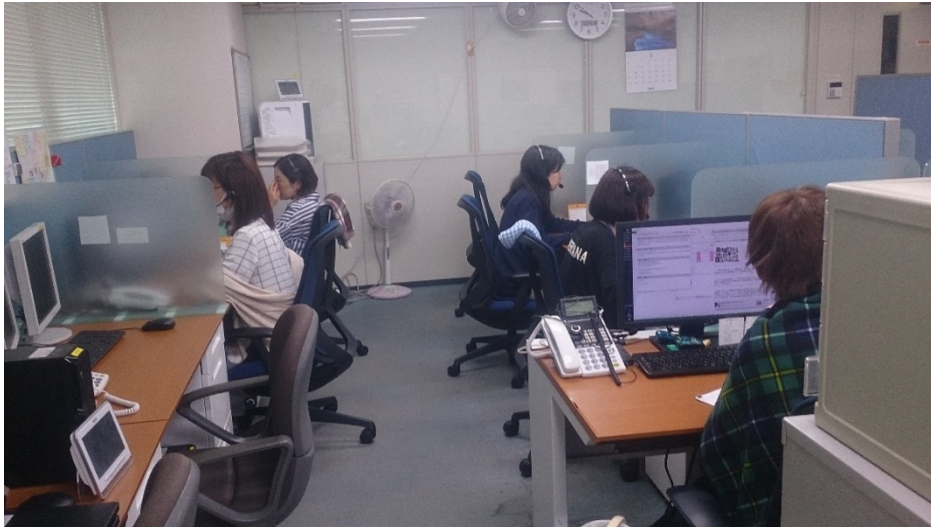
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1.E-BIDDING support center (a part of JACIC)

This center is entrusted from MLIT to do the help desk for the bidders and the owner of MLIT e-bidding system.



In every year, this center receive the telephone call about 12,000 times by 7 lines and 9 operators like above.

2. Problem to be solved

It is entrusted work from MLIT. And this year's work specification said that You have to prepare the necessary stuff and facilities **as many as not to make people wait** when they call.

It is a **rather special** spec in Japanese public work. It is called '**performance regulations**'. Most of case are '**amount regulations**' as like as 'to prepare stuff and facilities **to meet** 12,000 times telephone calls.' The work amount is usually expressed in the spec.

performance regulation

e.g. Not to make wait

VS

amount regulations

e.g. To meet 12,000 calls

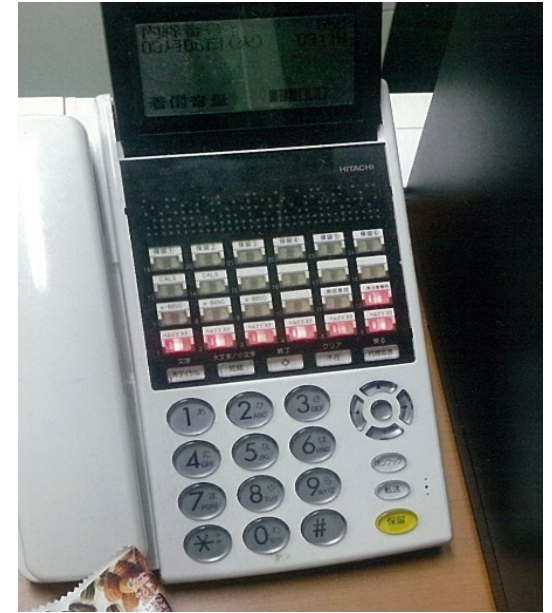
This 'performance' spec seemed to be possible to do actually for us.

But there was a problem. Because

How we can prove 'not to make people wait' ? It seems to be a little difficult to prove.

Actually maybe we can do it with no problem, because we have many years' experiences.

But I, the director of this office' think I need a new tool and data to prove it.



3.Method to solve

My idea was below:

In JACIC, another help desk for another system uses **IVR** (interactive voice response) application for the good service.

IVR application has **originally** the function of **automatic voice answer** if the line is busy.

But it has also a function to record every telephone call. And

I found that this **record analysis will give us** the data we need.

We adopted the IVR2430- II (TAKACOM Co. Ltd.) to get the data. It is just one box as picture.

自声応答転送装置 **IVR-2430 II** 価格 標準価格
初年度6回線

技術基準適合品/□000132A06 本体寸法(幅×奥行×高さ)/430×286×177mm,1



3つの動作モード ○応答・転送/お待たせ/お留守番を1回に選択	最大24回線収容 ○収録回線数: 初年度6回線(最大24回線)
モニター機能 ○現在の着信件数、お着件数など管理室のパソコンからリアルタイムで確認	年間タイマー** ○パソコンでデータ入力ソフトにより、タイムスケジュール作成可能

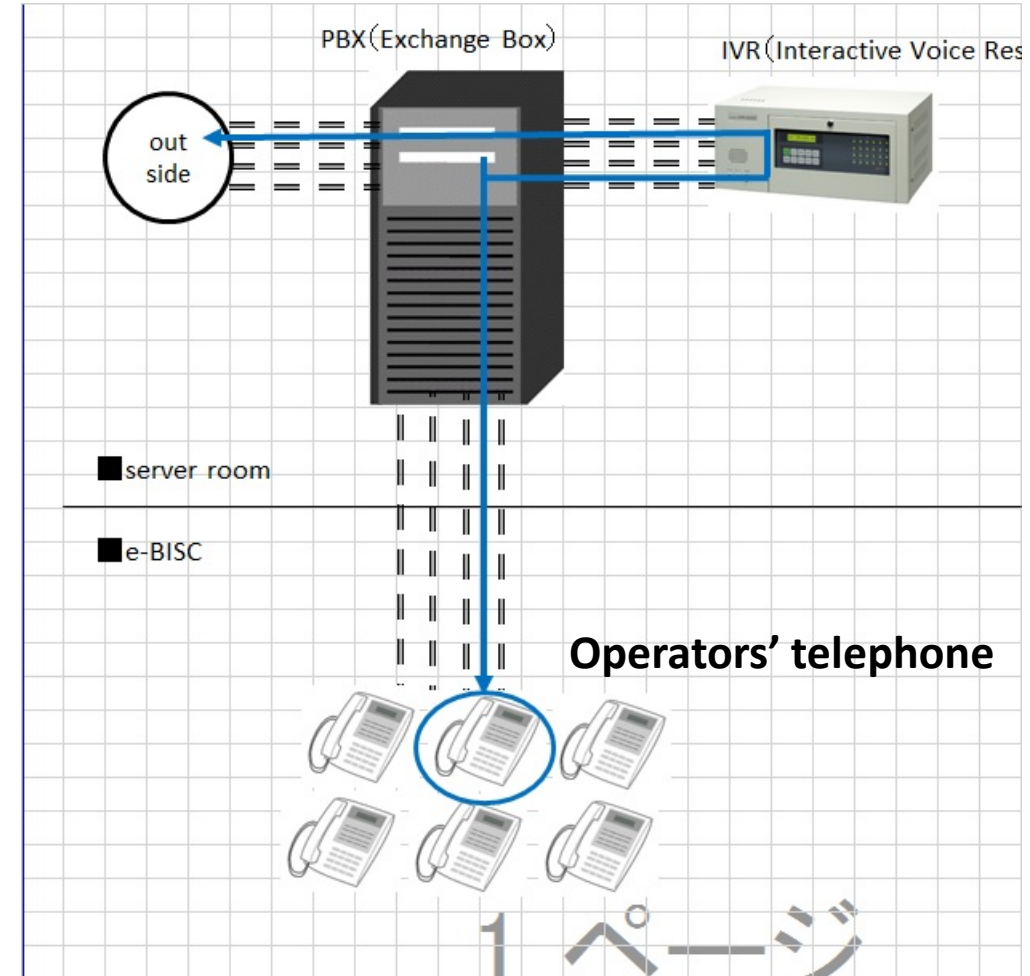
メッセージ録音・再生
録音容量:フラッシュメモリーカード(最大60分/メッセージ数:145ch)

※1 添付のカード付アダプタによる
※2 最大100台の累計データ自動集計可、最大1,000台の本装置の

Joint system for IVR

IVR machine is connected as like the picture. And so it can get the **all log** of phone calls. (time and times)

IVR is planned **several times** to issue the interactive message. When the operators are busy on other lines, the message will be, for example, 'our help desk is busy at the moment, Please hold a little' repeated.



Function and analysis

In the log data,

If there is no time of automatic voice issuing, it shows no people waited when they call.

We set the message to issue for every 15 seconds as below picture.

If the 1st message will be issued and there will be no 2nd message, it will be proved that the operator meets the call after a little seconds. We have set the interval to be **15 seconds** between message.

▼着信からお待たせまでの動作図



4. Result Data

This picture shows the daily data.

7 lines are under work of helper, but the 8th line is additional for IVR only.

7 Line is busy in 12th, 13th, and 18th. But it was very short time.

○ mark shows the 8th line moved.

But 'no' shows the 1st message didn't issued. It means that the operator can meet the telephone before the 1st message. She has maybe finished another telephone and answer the waiting one.

This data shows also that this operators team has no disorder no confusion and our 7 line telephones are just enough facilities to meet the work.

LIST OF CALL (JUNE of 2018)

2018	受発注者共用回線			
	CALL	full busy 7 Time	8	Interactive Voice
6/1(金)	50			
6/2(土)	0			
6/3(日)	0			
6/4(月)	55			
6/5(火)	53			
6/6(水)	53			
6/7(木)	51			
6/8(金)	51			
6/9(土)	0			
6/10(日)	0			
6/11(月)	45			
6/12(火)	55	・10:00~11:00	○	NO
6/13(水)	55	・11:00~12:00	○	NO
6/14(木)	51			
6/15(金)	50			
6/16(土)	0			
6/17(日)	0			
6/18(月)	68	・10:00~11:00		
6/19(火)	43			

5.conclusion

- We , e-bidding support center, have to work with the specification of performance rules this year.
- JACIC introduced the IVR application in order to get the new data.
 - From the result of given data, we believe that we almost fulfilled the specification required for this work.
 - It is not perfect research. We can think that there may be other probability case. And so we have to confirm it by further research.