Are SmartPhones Making IVRs Obsolete?

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About Enterprise Integration Group

An international professional services corporation
Offices in US, Switzerland, UK, Australia
Vendor neutral, Established in 1993
Specializes in telephone user interface design
Design, human factors, and engineering specialists
Known also for publications and training
Ever Expanding Channels for Customer Service

Face to Face
Telephone
  IVR
  Person to Person
Web
SMS/Text
  Single/Multiple text
  Links to mobile internet…
Text Chat
  Skype, MSN, Facebook chat
Social Media
  Twitter, Facebook, My-Space
Smartphone Apps
The Self-Serve Generation

We are seeing different emerging populations
  Face-to-face generation – Don’t want to use telephones
  Telephone generation – Don’t want IVRs
  IVR generation – Don’t want to speak to a person
  Web generation – Don’t want use the voice channel

When the web generation call they really need to talk with someone
What are IVRs actually for?
What are IVRs actually for?
Adding IVR Self-Service
Merging Call Steering with Self-Service
The Smartphone App
The Smartphone App as a Contact Portal
The Smartphone App with Visual Call Steering
Visual IVR/Call Intercept (Probably Doomed)
What if phone numbers are replaced by links?

Links
Replace
Phone
Numbers

Visual Call
Steering

Contact Us
Links Replace Phone Numbers
Can IVRs do anything that apps can’t?

Menus

Data Entry

Give Information

You can say..
New Transaction
Create an account,
View my transactions,
Or something else..

Say the state name.

On the 5th January, an online credit of 1 dollar.
On the 5th of January a debit of 52 dollars
On the 5th January a bill payment of 300 dollars....
Visual Versus Voice-Only User Interfaces

<table>
<thead>
<tr>
<th>Visual</th>
<th>Voice Only</th>
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<tbody>
<tr>
<td>Persistent</td>
<td>Ephemeral</td>
</tr>
<tr>
<td>High Bandwidth</td>
<td>Low Bandwidth</td>
</tr>
<tr>
<td>Not Taxing on Memory</td>
<td>Taxing on Memory</td>
</tr>
<tr>
<td>Multi-Modal</td>
<td>Uni-Modal</td>
</tr>
<tr>
<td>Multiple/No Goals</td>
<td>One Goal</td>
</tr>
<tr>
<td>Stable to error</td>
<td>Unstable to error</td>
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These distinctions dominate the user interface design.
They also explain the rapid uptake on smart-phones.
In this session we will focus on voice-only design issues.
What about Language Understanding?

Rapid reference to things not in immediate visual field or audible menu

No need to constrain the user / Difficult to constrain user

Describe problems rather than express actions

I want a film starring Johnny Depp

Show me all the direct debits that haven’t gone out this month

How much interest have I paid in the last year

Do you offer any benefits on this account if I pay a little extra

How do I set up the email on my Android?
IVR - Identification & Verification

“Ok, in your own words say the reason for your call”

“change my bank details”

Consultant specific task?  

Offer the appropriate IVR Self Serve Tasks or option to break out to an advisor

“Good morning Mr Jones, my name is Jane, I see you’d like to change your bank details, I can help you with that....”

NLU in the Call Center
Natural Language Understanding on Smart Phones

Rapid Adoption
Local v.s. Cloud still evolving
Mixed Mode Dialog Evolving
Finally throw in unified security....

One Security Model
Supports the Rich Variety of Different Biometric and On-Screen Methods
One Compliance Model
Established Security Reset Protocols
Bringing it together
Conclusion

IVRs will be with us as long as we have telephone numbers
Apps will probably start to act as customer service portals
Enterprises set to make the same mistakes with Smartphones
Will links ever replace phone numbers?
## Contact Information

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