



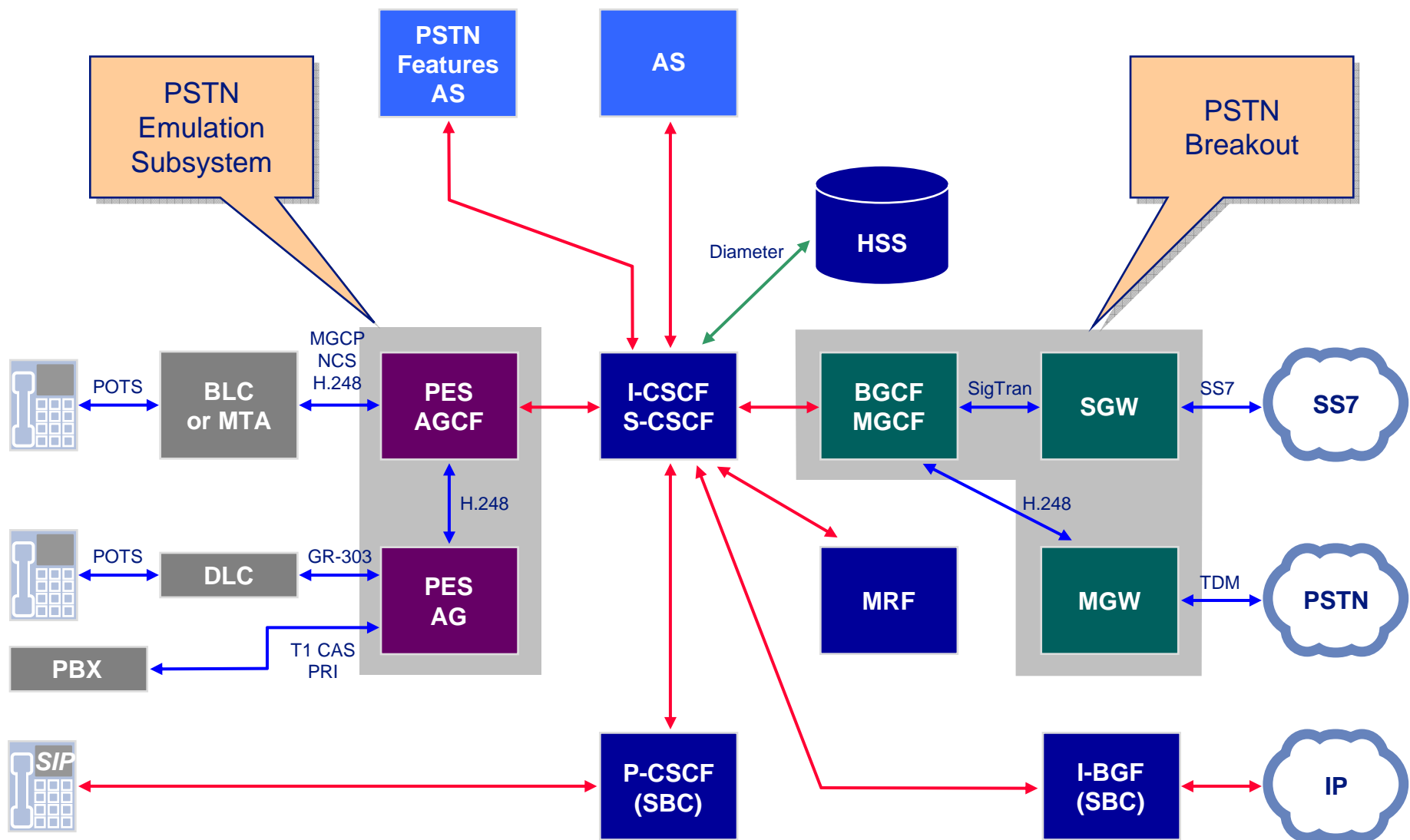
## **Emergence of IMS Applications**

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## Drivers for IMS in Wireline Networks

	IMS Driver: Switching	IMS Driver: Applications
Decision focus	<ul style="list-style-type: none"> <li>• Engineering</li> <li>• Operations</li> </ul>	<ul style="list-style-type: none"> <li>• Marketing</li> <li>• Competition</li> </ul>
Deployment model	<ul style="list-style-type: none"> <li>• Class 4/5 switch cap &amp; grow or replacement</li> </ul>	<ul style="list-style-type: none"> <li>• Overlay network</li> </ul>
Key objectives	<ul style="list-style-type: none"> <li>• Replace obsolescent equipment</li> <li>• Reduce opex</li> </ul>	<ul style="list-style-type: none"> <li>• Increase ARPU</li> <li>• Attract and retain new subscribers</li> </ul>
Key factors in IMS decision	<ul style="list-style-type: none"> <li>• Open, interoperable, scalable, manageable, legacy equivalence</li> </ul>	<ul style="list-style-type: none"> <li>• Differentiated services</li> </ul>

## PSTN Emulation Architecture



## PSTN Emulation as an IMS Application

- “Legacy Equivalence” means lots of interesting challenges
  - Making all the calling features work exactly as per old switches
  - Handling hook flash for Call Waiting, 3-Way Calling etc
  - Ringsplash for Call Forwarding
  - Distinctive Ringing
  - ISDN PRI mapping to SIP
  
- Q: Why bother?
  
- A: IMS is worth it because it provides the best foundation for new services that augment the basic PSTN features

## **IMS as Overlay Network for New Services**

- No need to worry about legacy PSTN equivalence
- Services to reflect “here and now” needs, not those that date back 20-30 years
- Services that deliver high value to niche markets, not “lowest common denominator” generic capabilities
- Sweet spot is hosted services for SME market
- Hot area right now is Key System Emulation
  - Don’t give me a new voice service, make it look exactly like my old familiar one!
  - Doing this with SIP signaling throws up numerous interop challenges

## **IMS Services and the Web**

- Web is extremely important component of IMS services
  - Yes, even with PSTN Emulation!
- Purchase of new services
- Control your PSTN calling features
  - Try configuring Selective Call Forwarding over the phone!
- Control advanced new call services
  - E.g. incoming call management with screening lists and schedule-based controls
- Interact with messaging services
  - View list of voicemails, listen, forward, delete etc
- Interact with your calls via your PC
  - Click-to-dial
  - Incoming call popups, new message waiting popups

## Random Thoughts on Some New IMS Services

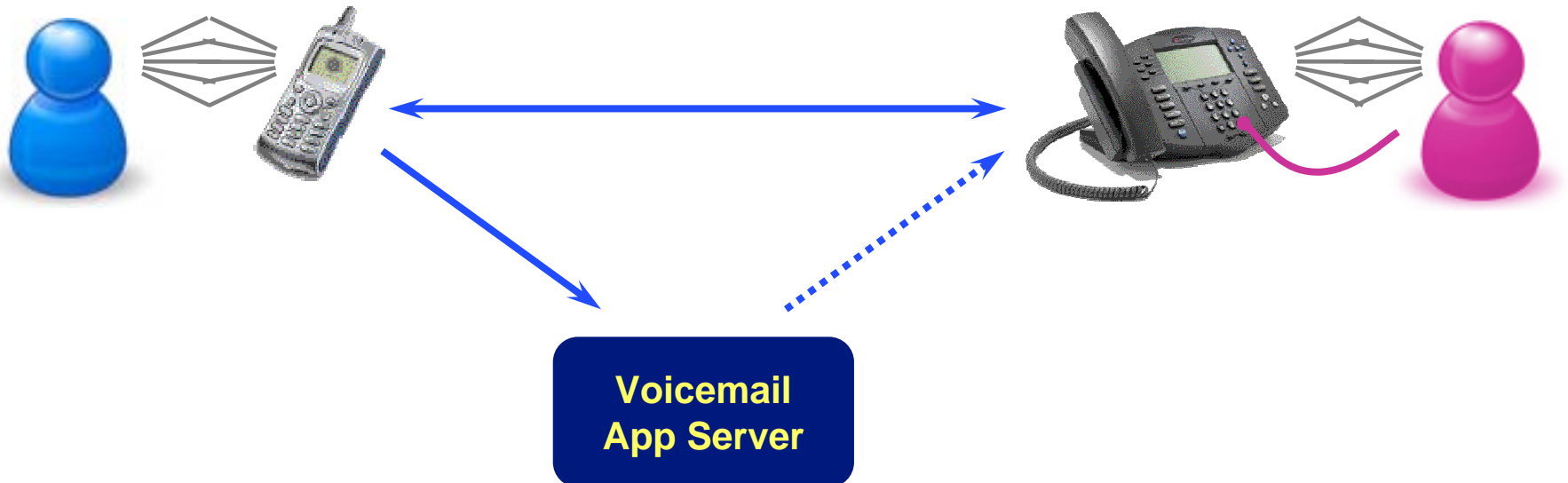
Any or all of these could be implemented within a legacy TDM architecture – but IMS makes things *much* easier

- Personal CNAM delivery
  - Calling name from your own Contact List
  - No external database dip \$ required
- Voice-activated dialing
  - You can do this on your cell phone – why not on your landline?
- Custom ringback
  - An untried market – who knows how this might get used?
- Live message screening
- Mid-call transfers

## Live Message Screening

Hi Jane, it's Mike, please pick up

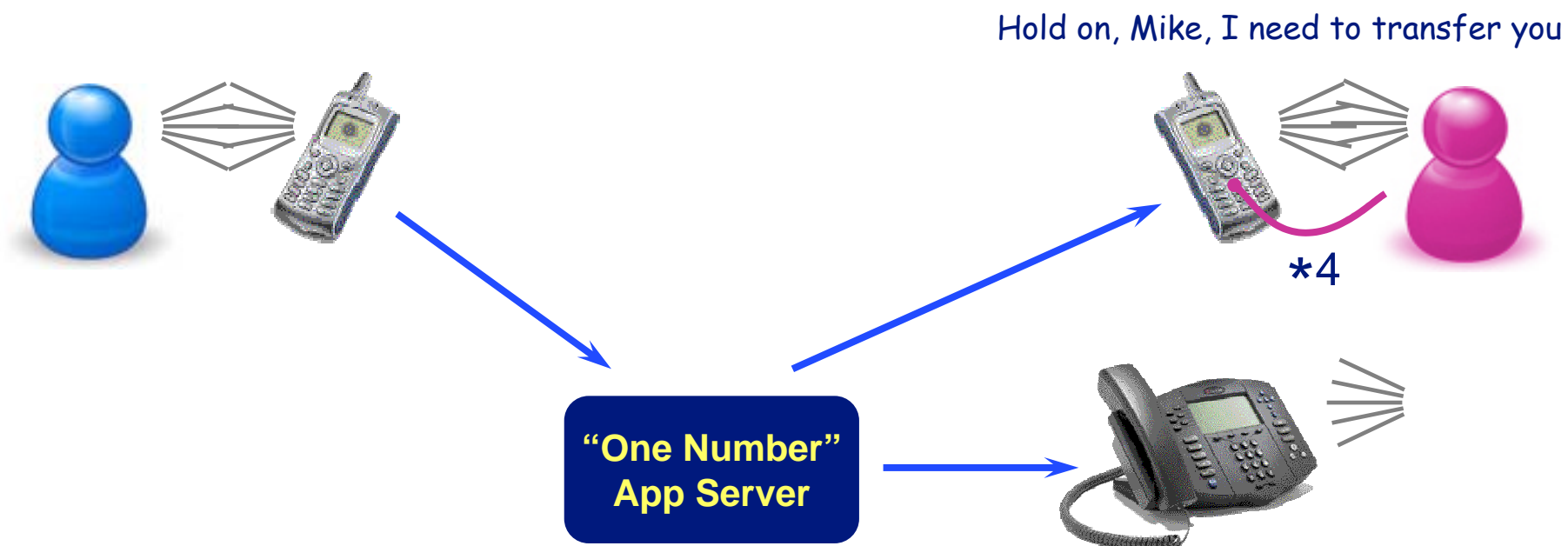
Hello, Mike



- Lack of call screening is number one reason for resistance to network voicemail
- Subscribers retain personal answerphone machines

- One-way media for screening call
- Local subs get distinctive ring (or auto-answer to SIP phone)
- Universal application for business, residential, wireline, wireless

## In-Call Transfer



- Enhanced Find Me / Follow Me and "One Number" service
- Short codes for live transfer of calls between and among configured group of phones

- Example: FMFM directs call to cell phone; on arriving at the office, transfer call to desk phone
- Value-added Fixed-Mobile Convergence capability

## **MSF and the Value of GMI Events**



GMI 2006 showed us that:

- IMS interop is for real
- There are (naturally) interop issues, but once surfaced can be quickly addressed
- PSTN services can work fine over IMS
- Key IMS concepts such as SCIM for service broking work in practice
- IMS networks can evolve out of pre-IMS next-gen voice networks

## **Emergence of IMS Applications**

- IMS is not just about new applications
- IMS architecture with PSTN emulation meets needs of legacy Class 4 / 5 switch migration
- IMS doesn't fundamentally change the application landscape, but it does make some things much easier
  - Application development and deployment
  - Service and subscriber management
- Business case for advanced and specialized applications is far more compelling than it used to be
- Newness of standards means real-world interop has its challenges – MSF work is highly relevant