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Newsletter of the IT, for the  
IT and by the IT

## Inside this Issue

**1** Yet another expansion for Ufone

**2** When 'best practices' become 'worst practices'

**3** Pakistan's cellular scene

**3** 3G and 'Killer Applications'

**4** Camera! Camera!

**5** Network security – the right approach

**5** Data Warehousing in Telephone Networks

**6** Databases and the people who handle them

**6** Do's and Dont's of Business

**6** ONE Voice

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Quarterly

# IT Newsletter

## Yet another expansion for Ufone

Ufone launched its operations in 3 major cities of Pakistan namely Islamabad, Lahore and Karachi in 2001, Ufone services are offered to its customers by Pak Telecom mobile Ltd., which is a 100% owned independent subsidiary of Pakistan Telecommunications Corporation Ltd. The first phase consisted of 150k subscribers most of which were prepaid than postpaid.

Due to the over whelming response received from the people, Ufone had sold out its capacity quickly. It then went into another expansion phase, which eventually brought the network capacity to 580k of which we are already at 555k subscribers.

So much progress in so little time is a remarkable achievement for not just one department but the whole company for the people who were in leading roles to people who were in support roles.

If this success is an advantage on one hand, it is a disadvantage on the other since not all the systems working in the organization were not sized to handle 580k subscribers services. Hence, most of the systems underwent a 'migration' phase as well which enhanced not only their capacity to handle more subscribers but also improved the system features at the same time.

Therefore, now, Ufone covers over 80 cities and over 4 major highways. Internationally, today Ufone has a roaming arrangement with over 70 operators all over the world. With these enhancements to the systems done at periodic intervals, Ufone was able to

offer services that are more advanced to its customers such as VPN (virtual private networks), GPRS (general packet radio service), and MMS (multi-media message service). Services such as messaging services and info services are a favorite among Ufone customers.

Ufone is now expanding even further with a target of over 1.2 million customers. Good luck Ufone and good show Ufone team.



## Editor's Note

This newsletter being the first in IT and even Ufone, aims to share information, develop knowledge banks, promote good relations and provide exposure to the hidden talents of the contributors and writers. Another aim is to promote departmental cohesion and harmony so that the organizational objectives are served better.

The theme of the newsletter is the basic introduction of what IT is all about. Although it caters to the varied interests of the readers, we have made an effort to keep it relevant and to the point.

With your encouragement and contribution, we hope to make this newsletter newsworthy and productive.

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# When 'best practices' become 'worst practices'

**Should organization care about best practices? How can organizations prevent the best practices from haunting them as 'dogmas of the past' and impeding their progress during 'interesting times'?**

The current thrust of organizational business and performance management initiatives is usually on archiving 'best practices' for later referral by other employees. It is popular belief that archival and subsequent referral of such information would facilitate efficient problem solving and prevent unnecessary allocation of sources to inefficient search processes. Incidentally, in due course the archived 'best practices' tend to define the 'company way'. Business solutions characterized by memorization of best

practices may tend to define the assumptions that are embedded not only in information databases, but also in the organization's strategy, reward systems and resource allocation systems.

Within a changing business environment, such organizations may find themselves doing "more of the same" better and better, however, with diminishing marginal returns. Ducker has attributed a similar process for the grand failures exhibited by 'blue chip' companies of yesterday. Just like the 'boiling frog' who is unable to sense the gradual change in temperature and ultimately boils to death, the cycle of doing "more of the same" tends to result in locked-in behavior patterns resulting in organizational "death spiral."

Yesterday's core capabilities embedded in best practices could become tomorrow's core rigidities. Institutionalization of 'best practices' by embedding them in information repositories may facilitate efficient handling of routine, 'linear,' and predictable situations during stable or incrementally changing environments. However, when change is radical and discontinuous, there is a persistent need for continual renewal of the basic premises underlying best practices. Organizations in such environment need imaginative suggestions more than they do best practices.

One possible option for getting out of the "status quo" often implied by "best practices" may be to view the following processes as necessary, relevant, and occurring in a parallel state. [Most current thinking -- suggested by literature based on theory and practice -- suggests an oversimplification of what is necessary for sustained competence.]

- a) Consider "programming" and "deprogramming" as parallel processes;
- b) Consider "reinforcement" and "exploration" as parallel processes;
- c) Consider "learning" and "unlearning" as parallel processes;
- d) Consider "efficiency" and "effectiveness" as parallel processes;
- e) Consider "construction" and "deconstruction" as parallel processes; etc.

The basic intent is to set up a "real time" feedback-and-feedforward loop of "actively" scanning the unstructured reality [or what Ackoff called "messes"] for emerging "patterns" that suggest the emergence of something "new," while ensuring that there is a mechanism for testing of these perceived "patterns," and implementing the resultant "lessons learned" into the extant logic of the processes. The greatest challenge is being able to do the "former" while striving for the "latter" in the above instances a) - e). In other words, it is challenging to implement "efficiency" while unraveling the underlying logic to strive for "effectiveness." Similarly, it is challenging to implement "learning" while unraveling the underlying assumptions to strive for "unlearning," and so forth.

There could be various arguments that may be made to support the above logic. For instance, one may consider that any competitive advantage is transitory -- given the changing dynamics of the environment, the industry and the competition. What is "best" today may be "worst" tomorrow depending upon the shift in the references that determined its "best-ness." Hence, the need for ongoing reassessment.

Now, the question of how it can be implemented. Well, there does not seem to be any simple answer for this issue. Most experts, as evident from my discussions at some of the big KM conferences, still adhere to the linear logic of alternating "former" and "latter."

Due to the very nature of programmed machinery of information technologies - they would demonstrate superior performance [in the foreseeable future] for an efficiency-seeking, optimization-oriented, convergent model. However, human minds, being endowed naturally by sense making capability, could impose structures of "patterns" upon the changing shape of "messes" and provide the necessary correction. Importantly, this correction needs to be scanned, tested and implemented in "real time" to keep in tune with the changing dynamics [discontinuities] of the external environment.

**Days to remember...**

Description	Date
New Year day	Jan 1
Spouse's Day	Jan 26
Chinese New Year	Feb 1
Valentine's day	Feb 14
Women's day	Mar 8
Daylight Saving 1	Apr 6
Easter day	Apr 20
Earth Day	Apr 22
May day	May 1
Mother's Day	May 11
World Telecom Day	May 17
Best Friend's day	Jun 8
Father's Day	Jun 15
Father in Law's day	Jul 30
Sister's Day	Aug 5
Son & Daughter's day	Aug 11
Pak Independence Day	Aug 14
Grandparents' day	Sep 8
Boss's Day	Oct 16
Daylight Saving 2	Oct 26
Mother in Law's day	Oct 27
Halloween	Oct 31
Aids Day	Dec 1
Quaid-e-Azam Day	Dec 25
Christmas day	Dec 25

# Pakistan's Cellular Scene

## *Two more licenses!!!*

*By-Rana Rizwan Akram*

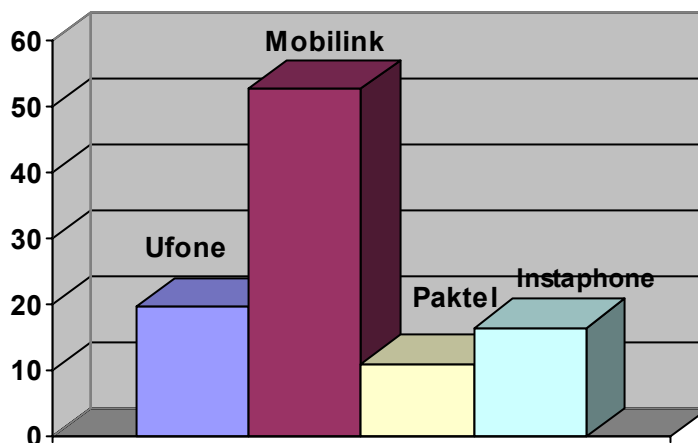
With four cellular operators already in the market i.e. Paktel, Instaphone, Mobilink and Ufone, PTA (Pakistan Telecommunication Authority) has already tendered for two more cellular licenses late 2003. And you know what, over 33 companies from all across the globe have responded to the tender. Now this is called progress.

With just under 2% penetration, Pakistani market is ripe for investment in the cellular business. The trick for the government will be to offer the licenses on terms that are not only beneficial to their own policies but to the general public as a whole. On the other hand, as

for as the cellular service providers are concerned, they will have to do an extra effort, go an extra mile to be able to appeal to the customer who is gradually becoming an informed party. The service providers will have to have some unique competitive edge since low price alone is not a factor any more. The current 5 million cellular users will, along with the potential users eye for

who offers what (free handsets etc) and for which price. 'Service' will be the keyword here.

Given below is the %age share of Pakistani market between the four operators:



## ***3G and 'Killer Applications'***

3GSM\* is the latest addition to the GSM family. 3GSM\* is about having third generation mobile multimedia services available globally. 3GSM\* focuses on visionary communications, in more ways than one. It is about the new visual ways in which people will communicate and the unique vision of the GSM community, which has always focused on the future needs of our customers.

Killer applications are applications, which will be hot, in demand and most in use over the next few months and years i.e.

- Live streaming of audio/video (moving images & sound)
- VoIP, Bluetooth, GPRS, MMS
- Online gaming
- Virtual Home/ Office environment
- Remote LAN access
- Dynamic Authoring
- Electronic agents
- Customized offerings
- Collaborative working
- Browsing/Chat
- File transfer/ Downloading/ Software Applications
- Online Commerce

So, what will be the 3G killer application? Your 3G mobile is a videophone, TV, radio, small wearable computer, game console and platform, high speed Internet, music player or even any imaginable remote instrument or tool. It also has a built in virtual LAN, home environment (even when roaming) and accurate location information.

**Introducing Two new sections in the next issue:**

### ***Events Calendar***

**Date**  
**Time, Location**  
**Description of the event**  
**Event name**

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### ***New Appointments/ Promotions in IT***

**Name**  
**Title, Department**  
**Hired/Promoted from**

*Send your contributions for both sections at: [billing@ufonegsm.net](mailto:billing@ufonegsm.net)*

# Camera! Camera!



IT teams enjoying themselves – snapped after a cricket match



IT team wins a match from NCR



Spirit of unity among the IT team members is evident at an Iftar Party



IT-Billing photographed with the Quality Lead Auditor from BVQI



IT team had a fun cricket day with the ADC Australian team



Dinners and get-togethers are common among IT teams

## Hmm, Right?

- If you are not living on the edge, you have too much space
- You'll never learn anything if your mouth is running.
- Optimism is a mania for saying all is well when one is in hell.
- Endurance is the secret of life
- No Brain, No Headache
- It takes one to know one
- Life's not fair and you can't change that.
- An elephant is just a mouse, built to government specifications
- Pain is inevitable, suffering is optional.
- In failure, you really learn about yourself
- Not making a decision, is a decision in making
- If you don't ask, they can't say "yes".
- I support publik edekashun.
- If you can't escape, enjoy it.

## Data Warehousing in Telephone Networks

Data warehouses serve as powerful strategic weapons in the telecom marketing wars, arming carriers with information to identify the most profitable, highest-spending telecom customers. More powerful than any previous type of statistical analysis, data warehouse technology exposes customer usage patterns and spending habits. Until now, the maximum number of customer variables that could be evaluated at once was seven; in a data warehouse, the number of variables are essentially limitless.

Data warehouses can be simultaneously mined by marketing, operations, finance, and call center managers to test promotional campaigns, forecast demand for network development, target cross-selling efforts, detect fraud, and acquire, win-back, and retain

customers. With such tremendous amounts of information being crunched, carriers can design campaigns to maximize the profitability and satisfaction of targeted customers, making true mass customization and one-to-one marketing possible.

According to Insight, the cost of building a data mart or data warehouse can run anywhere from \$40,000 to \$3 million to implement, depending on the size of the carrier and the number of subscribers involved. Much of the upfront cost is in the hardware infrastructure; software and operational costs will grow as the system grows. Insight forecasts that worldwide expenditures by telecom service providers on data warehouse systems and projects will grow from \$284 million in 1998 to just over \$2.18 billion in 2003. However, the economic benefits projected for a carrier can easily justify the data warehouse investment.

## Network Security:

### *The right approach.*

When most people talk about security, they mean ensuring that users can only perform tasks they are authorized to do, can only obtain information they are authorized to have, and cannot cause damage to the data, applications, or operating environment of a system.

The word security connotes protection against malicious attack by outsiders. Security also involves controlling the effects of errors and equipment failures. Anything that can protect against a deliberate, intelligent, calculated attack will prevent random misfortune as well. Security measures keep people honest in the same way that locks do. This article provides specific actions you can take to improve the security of your network:

- **Know your enemy**  
Consider who and why someone might want to circumvent your security measures and identify their motivations
- **Count the cost**  
understand the costs of the measures themselves i.e. delay and the costs and likelihoods of security breaches
- **Identify your assumptions**  
Be sure to examine and justify your assumptions. Any hidden assumption is a potential security hole.
- **Control your secrets**  
Security systems should be designed so that only a limited number of secrets i.e. passwords need to be kept.
- **Remember human factors**  
Users must understand and accept the need for security.
- **Know your weaknesses**  
Understanding the weak points is the first step toward turning them into secure areas.
- **Limit the scope of access**  
The security of a system is only as good as the weakest security level of any single host in the system.
- **Understand your environment**  
Noticing unusual events can help you to catch intruders before they can damage the system.
- **Limit your trust**  
You should know exactly which software you rely on.
- **Remember physical security**  
It makes no sense to install complicated software security measures when access to the hardware is not controlled.
- **Security is pervasive**  
Users should consider the security implications of every system change they make.

## ***Ufone IT-Billing get ISO-9001:2000 Certified!!!***

IT-Billing got ISO-9001:2000 certified in August 2003, a big achievements for the team and a milestone in the history of Ufone, IT-Billing being the first one to achieve any such certification in the entire company. Ufone now becomes the 2<sup>nd</sup> in the cellular industry of Pakistan to gain such an honor.

Speaking to the team one becomes all too clear on the purpose of the certification i.e. continual improvement. ISO-9000 is a family of standards that stresses on customer focus and executing a process approach while keeping the other leading principles of the standard in view i.e. leadership, involvement of people, systems approach to management, continual improvement, factual approach to decision making and mutually beneficial supplier relationships.

It takes commitment from the management and the determination of the team to achieve such a target. Realistically speaking, for a department observing no proper processes or procedures, it would take around 3-4 months to come to a point where they can officially start working for the certification. Another 2-4 months of official record keeping and following processes, and the department is ready for an External Audit.

## **Databases Are Critical to Business, So Who Manages Them?**

There are few businesses that understand the role of the database administrator (DBA) and the essential role DBAs play in managing the overall enterprise infrastructure. As a result, many companies become consumed with daily issues instead of completing critical business initiatives. A DBA's role varies based on an enterprise's infrastructure.

Many organizations consider the role of the DBA as someone who monitors a database to watch if it is up or down. That may have been the case five years ago, but today's DBA duties go beyond the traditional operations, monitoring and reporting. They also include database performance analysis, corrective action, proactive tuning, maintenance, administration and backup and recovery across the entire database application infrastructure.

One HR job description may define a DBA as: "One who administers and controls an organization's data resources. Uses repeatable practices to ensure data availability, integrity and security, recover corrupted data and

*Continued on Page 7*

### ***Top Ten Do's When Starting a Business***

1. Live frugally to build a start-up nest egg.
2. Be sure your intended business has long-term economic potential.
3. Aim to become a specialist.
4. Work first for someone else in your intended business.
5. Adapt to your local market and tastes.
6. Prepare a business plan before you start.
7. Learn computer and e-commerce skills before you start.
8. Have a lawyer and accountant before you start.
9. Know how to keep score: learn accounting.
10. Prepare frequent cash flow projections.

### ***Top Ten Don'ts When Starting a Business***

1. Don't quit your job.
2. Don't be impatient in selecting a business.
3. Don't sign a lease or franchise agreement without a lawyer.
4. Don't seek out a too highly challenging business; wait for the fat pitch.
5. Don't skimp on insurance coverage.
6. Don't be better at opening stores than operating them.
7. Don't overlook adequate employee training and motivating.
8. Don't let anyone sign checks.
9. Don't let anyone sign purchase orders.
10. Don't hesitate to promptly cut costs in business downturns.

### ***ONE Voice ...***

This section is dedicated to the issues, concerns and suggestions of the team members not necessarily related to work.

- Proper parking space/shelter required at the MSC
- Management should frequent their visits to the MSC
- HR should be more personally involved in the development of the employees
- Car loan, Home loan schemes should be issued for everyone
- MSC needs proper arrangement for some sport/recreation activity for employees working in shifts
- Cafeteria needs proper food arrangement and inspection
- Quarterly informal get-together should be arranged

*Continued from Page 6*

eliminate data redundancy, and leverage database tools to improve database performance and efficiency."

Is this the definitive function of a DBA? Oddly enough, no. The role of a DBA differs from organization to organization. For example, in a smaller company capacity, the duties of a DBA seem to be much broader than those defined and specified within a Fortune 100 corporation. In the centralized mainframe environment, a typical day of a DBA may consist of working with several analysts supporting a single operating system and a couple of programmers who supported the transaction processing applications. Contrast that to a distributed environment, where the role of the DBA is expanded by a variety of different operating systems, hardware types, applications and application servers combined with a greater number and diversity of customers.

One clear commonality is that to be successful in either environment requires the ability to support new business processes and applications for the future.

The leading challenge that organizations face today in their infrastructure management is getting past the reactive "fire-fighting." The majority of DBAs are not getting a chance to really add business value because they are bogged down with daily operational issues; many of which can be automated and prevented. Contrast that to DBAs, who has

one-third of their time set aside for research and education, who understand the business and how to apply new database technology advancements that ultimately enables new shareholder value.

Since the inception of the RDBMS, significant technological improvements have been made in processing power, storage and network architectures. New servers can now handle data processing loads that were unheard of a few years ago. Coupled with the hardware technology changes, there has also been a revolution in applications with technologies like Java. Database administration in general has been expanding since the days of using a database solely as a repository for data. As you read this, database vendors are implementing even more infrastructure functionality to support Internet e-business and e-commerce, and it is the DBA who is needed to research, determine and manage what can help the business.

So while it may be true that a database may better care for itself, there are now a variety of new infrastructure dependencies that must be managed, and it is the DBA who is needed to metamorphose to keep ahead of resolving the new database-driven application complexities. For it is the DBA who is always summoned when the Help Desk gets that call from the user saying, "The application seems to be running slow." How prepared is your organization to handle such a call?

**Your Notes and Comments:**

You can write to us at [billing@ufonegsm.net](mailto:billing@ufonegsm.net)

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