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ORAWORLD
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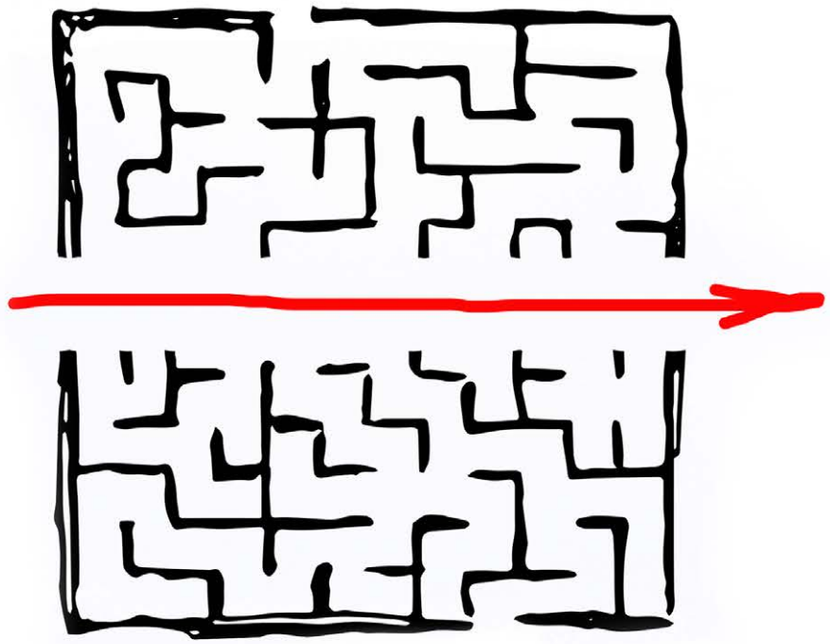
User Experience – An Introduction



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Have a comment? Suggestion? Want to submit an article proposal? **Here's how to do it.**

Editorial

Ann-Sofie Vikström Often
Board member of OUGN (Norway)

Dear Oracle User Group Members,

ORAWORLD always strives to offer you different views on different topics. The current issue is very much a product of this effort.

Digitalization for seniors is a topic rarely encountered in the media, but as seniors are going to go from minority to majority in most parts of the western world, it is becoming all the more important to tackle the problem at hand. Many seniors have not been dealing with digital technology on a broader scale, and will shun digital devices altogether. But we, who have lived our lives online, will assume to have service far more innovative then sending an email. There are some interesting gaps to fill now and in the future, and we are starting with it by sharing some thoughts on the topic with you in this issue.

Everybody knows Google, and most have an opinion on it. In Norway we even say 'Å google' (to google). You probably also have a similar phrase in your language. But did you know the history behind this company and its logo?

A focus on user experience is a must do for all companies that want to survive on the internet market. How many times have you started and finished using an ordering page or an application with too many steps, not knowing where to go next, or getting a lot of meaningless messages about constraints? And if you happen to have a name with the letter ö (like me), you will probably be very familiar with the obstacles you come across daily... Our cover story shows you which small but crucial details you need to keep in mind if you are working in the field of UX. APEX has also introduced some nice features on this matter.

Speaking about APEX. The Nordic APEX tour had a small start last year, inspired by the success in Sweden. Read about the experience from the meetup in Stockholm. We are planning for a new series in week number 36 including Denmark, Norway, Finland and Sweden!

Winter is now truly turning into spring. I wish you a sunny reading time!

Enjoy,
Ann-Sofie Vikström Often

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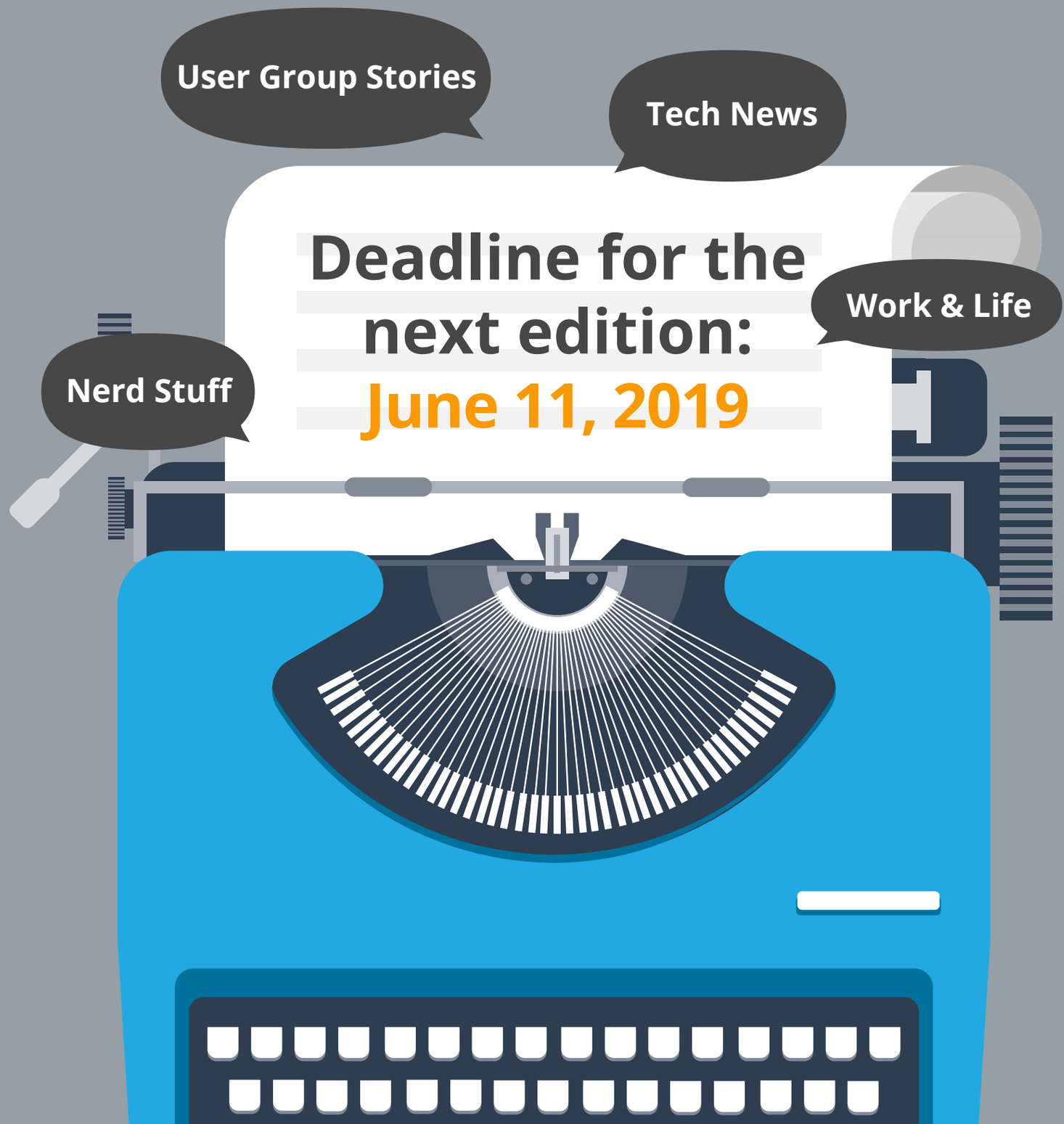
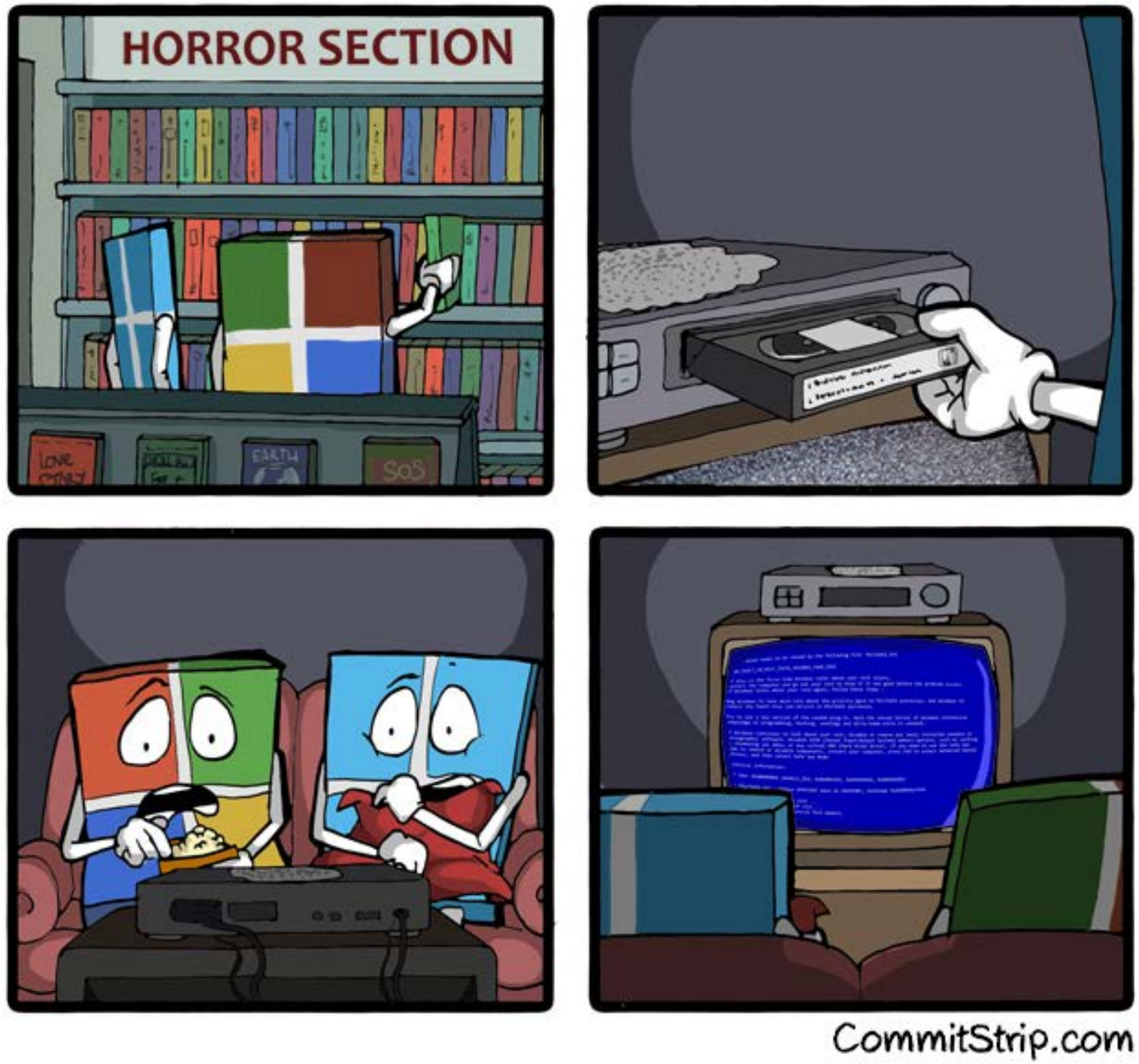
Please e-mail us your article via the online form at **www.oraworld.org**.



The Horror

www.commitstrip.com



CommitStrip is a daily strip recounting funny anecdotes of life as a coder mixed up with a dash of topical tech news. Find more comics here: ***www.commitstrip.com***

Sanela Lukavica

Thoughts on Digitalization and Technology for Seniors

In the case of old age, there seems to be a huge discrepancy between the process and the state. Most of us wish to grow old (or at least you will hear many say so), but actually being old is nothing you will find prosaically romanticized often. Considering the importance of the topic, the question what the overall digitalization and technology for seniors actually imply is more than justified. For the seniors themselves, and for the rest of us.

Demographics, or: How a Minority Slowly Becomes a Majority

Even if a person is spry and lucky enough not to suffer from health issues, the psychological aspect of old age will often run its disheartening course. This is where technology comes into play: The right technological device can make a decisive difference for both the individual with brittle health, as well as the person who has suffered from years of emotional neglect. Dealing with technology for the elderly, though, one encounters many questions that cannot be answered simply, or by placing a tablet into the hands of seniors and leaving them on their own. What you will find instead is an abundance of technological tools, marketed towards seniors.

Digital devices and technology for seniors are topics both present and strangely aloof at the same time. The random scan of your everyday surroundings will not exactly bring to light much marketing for seniors, at least not in Berlin. Dealing with the topic in public seems to be almost taboo, which suggests that the target group is rather small. If you try to get a glimpse of truth at the story that demography has been telling for years, just search for it in the vast expanse of the web. You will find that the marketing machine works very well indeed: Try googling "internet of things seniors", for example. A plethora of hits, faintly cloaked as objective scientific research, will lead you to products for seniors. This doesn't surprise much, well-to-do retirees in most European countries are well situated[1] and make for the perfect target group. Numbers speak for themselves, and it is no news that the scales of demography, especially in the western world, have been tilted. In 2017, the median age in 52 countries was over the age of 40.[2] In the Netherlands for instance, the median age was 36 in 1995, grew to 42.1 in 2015, and will probably be around 43.2 in 2020.[3] In a few decades from now, a considerable part of the world's population can be expected to be older than 50. What is called "technology" or "digitalization for seniors" might thus in time become the "norm". So, what are the preconditions seniors find?

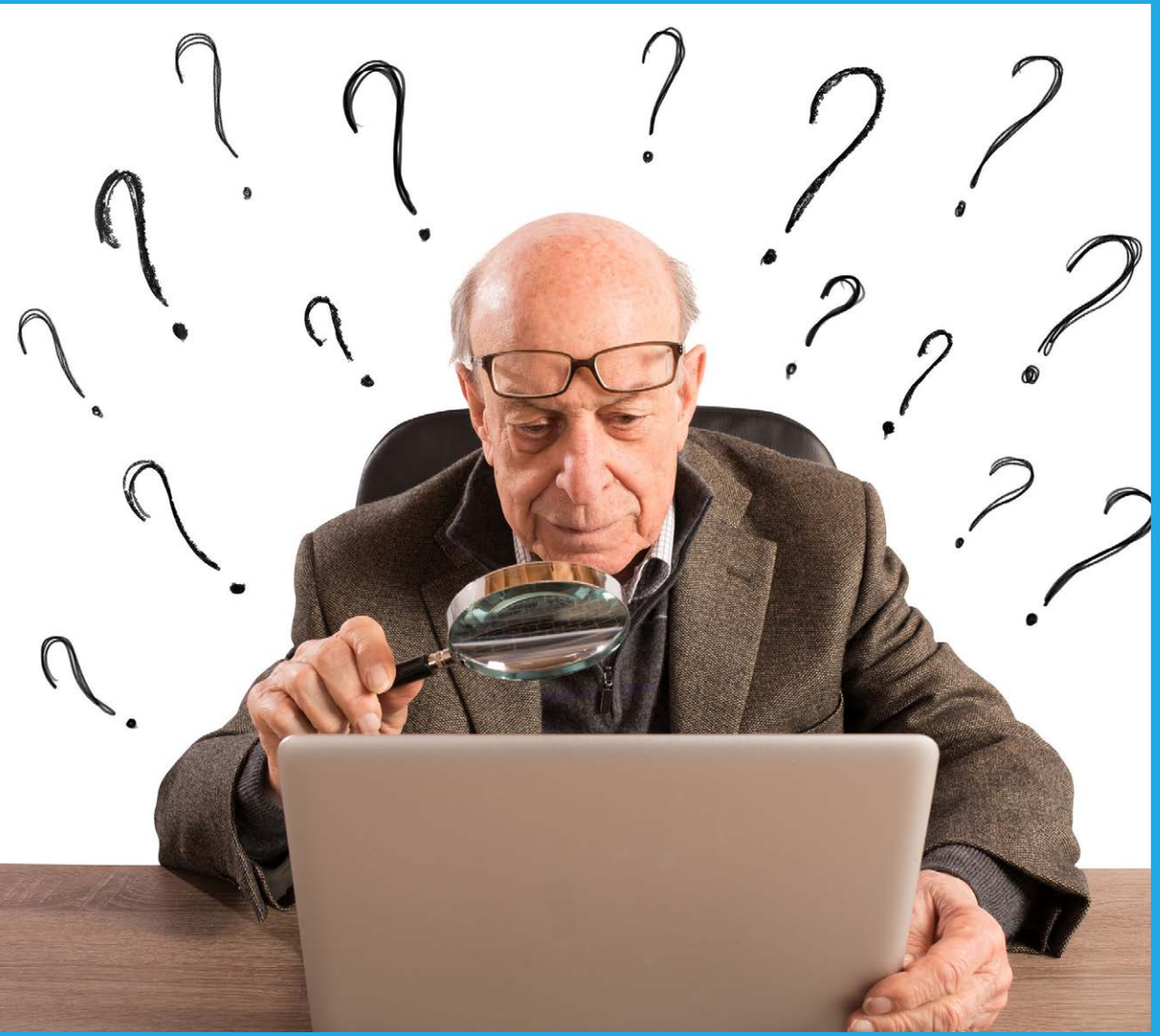
We are Prepared for the Digital Future! Are We, now?

Digital literacy will further grow, this certainly holds true for most societies worldwide. So, will pretty much everyone be able to handle a smartphone soon? Well, not exactly. While the inhabitants of Baltic or Scandinavian countries are by far the "internet savviest"[4] in both the private and the public sphere, there is a gaping chasm between these and other European countries, as the Digital Economy and Society Index Report 2018 – Use of Internet Services shows.[5, 6]

Many countries still have a long way to go to build a flawless internet infrastructure and accomplish an overall digital literacy. It is true that progress can quickly be made in these areas, but intricacies are still undeniably there when it comes to the use of internet in certain age groups. Take Germany, for instance: A study from 2017 has shown that about 10 million seniors have never surfed the web.[7] More problematic still: The size gap between the younger ones who use the internet, and seniors over 70 years who have never used it, hasn't diminished since 2001.[8]

[1] https://www.theguardian.com/commentisfree/2012/jun/26/fair-older-people-better-off-young
[2] 229 countries were ranked, https://www.cia.gov/library/publications/the-world-factbook/rankorder/2177rank.html
[3] https://www.statista.com/statistics/276734/median-age-of-the-netherlands-population/
[4] With their governments' investments in a flawless internet infrastructure, the switching to an e-government (with Estonia as the leading example), as well as the government endowed digitalization of schools, a profound digital literacy seems almost inevitable.
[5] https://ec.europa.eu/digital-single-market/en/use-internet
[6] As always, perspective is key: In fact, digital literacy is a building site in most countries of what is called the "first", "second", and "third" world. The average penetration rate of the world total was at a meagre 55.1% as of 2018, https://internetworldstats.com/stats.htm
[7] https://idw-online.de/de/news687320
[8] ibid.

This very much suggests that there is a strong disengagement of the elderly which could not be diminished through the years. With a life expectancy that is constantly growing, this is a situation likely to stay with us, perhaps even for decades.



How Can Your Result be Correct, if You Choose the Wrong Variables?

While GPS and sensor technologies have been reigning supreme for a long time, the internet of things (IoT) with its network of devices has now officially taken over in the industry and on fairs. Based on sensors, but on a much broader scale, this allows seniors to organize their routine with technology much more intuitively. With smart hubs, you are able to control your household devices and connect them as well, so that it makes life much more comfortable. It is the little slips of old age that can thus be avoided, but also serious health issues can be detected on time. For people of a certain age, IoT exceeds the question of comfortability; what they can theoretically gain from the use of it is a high amount of self-determination.

The problem with technology for seniors is that, most of the time, its products seem to be mere offshoots of solutions whose developers seem to have various target groups in mind in the first place. The sensors that are built into refrigerators to prevent their owners from running out of milk are pretty similar to the sensors used in pillboxes, warning seniors not to forget their medicine, for instance.[9] The list of groups that could put the technology to good use could be randomly[10] expanded. This doesn't have to be bad per se – on the contrary, we have to build on what we have – but we also need to be careful about the prerequisites different groups bring to the table. As a matter of fact, the use of the devices more often than not requires the invisible child or grandchild in the background. You will not be able to control your IoT network without your smartphone, as of 2019. With all the home devices collected in one place, namely the smartphone, it should be much easier to keep track of daily tasks. But the use of a smartphone itself

[9] https://www.cnet.com/news/smart-homes-technology-eldercare-seniors/
[10] https://www.technologyreview.com/s/426098/gps-enabled-shoes-to-help-track-down-grandpa/

can pose an insurmountable obstacle.[11] In fact, studies suggest that many seniors are often afraid to fail. If need be, younger people will try different methods to achieve their digital aim, whereas seniors will not even try for fear.[12] And perhaps for lack of a digital aim they could never develop in the first place. It thus seems that there is a missing link between the lacking skills of seniors who have trouble handling devices, and the development of these same devices.

Interdisciplinary Ways to Solve a Problem

We're also dealing with a paradox: Technology which is marketed towards seniors exists because many seniors have problems dealing with technology. Rather than "geared" towards seniors, it seems that many devices are merely "marketed" towards them after they were designed. Why is that so? One can only assume that the consultation of the elderly is not the primary goal during the development of many devices. They are not refined enough for the purpose assigned to them: to be used by seniors.

Obviously, the development of technology for seniors is rather demanding, because the digital skills of many are lacking. And developers are admittedly not the experts on the topic of technology for the elderly. How could they be? A much stronger integration of scientists in an interdisciplinary manner would be expedient. Gerontologists, for example, would be predestined to provide guidelines.[13]

[11] https://www.networkworld.com/article/3294198/why-iot-for-seniors-is-a-lot-tougher-than-itlooks
[12] https://www.deutschlandfunk.de/studie-fuer-aeltere-menschen-fehlen-digitale-angebote.684.de.html?dram:article_id=412686
[13] It is rather revealing that digitalization is not even mentioned as an area of activity on the website of the German Society of Gerontology and Geriatrics, https://www.dggg-online.de/ueber-uns/gerontologie.html

Do Great Devices Equal Great Possibilities?

What about the situation of seniors whose overall constitution is feeble, but who still wish to stay at home?[14] As it is, this is a rather large group which probably grows further with each passing year. The more impaired the health of a person is, the more technology could potentially be a column of security in their life. The potential of remote health monitoring is great. It can spare a patient many routine medical appointments,[15] and at the same time lead to an uninterrupted monitoring: aberrations can be immediately discovered and reported to relatives, for instance.

But the feeling that each movement is being monitored can also entail an encroachment of privacy. Even if it is "unobtrusive";[16] many of the strongest fears are not necessarily triggered by things you can see, but exactly by the things you don't see, and thus can't control. There are many younger people who decide against IoT in their homes, because they don't want to add their own data to the flood of data created every day. For older people, the feeling of being "observed" by a camera at home, or being "surrounded" by sensors can potentially become a factor that leads to deep unease. Even if it is the child or grandchild who checks on them. Rather than being helpful, this could further increase their vulnerability. Especially if the use of remote health monitoring is based on the wishes of the person's relatives and the "patient" does not want to have the device in his or her house. With technology being in a constant state of flux, tomorrow's solutions for seniors might prove to interfere with their privacy even more than sensors. Considering the fact that many seniors have serious „trust issues" when it comes to technology, it also isn't exactly helpful that they seemingly find their fears affirmed by news about the danger of hacker attacks,[17] or the abuse of data.[18]

From Families to New Concepts of Living

There can be no doubt about the fact that old age comes with many restrictions. But there can also be no doubt that the privacy of the elderly is a factor that should be of greatest importance to anyone dealing with them.

But what about the people who don't have a family? This is a group that is constantly growing, and if their financial resources are restricted, they will not be able to use the technology at all. Because the people monitoring them will expect to be paid. It is quite conceivable that such services will be offered by private health care providers on a large scale someday, though, and become affordable to more people. Whatever the outcome of the development: Dealing with the technology behind a self-determined life at home and tailoring it according to the needs of both the physical and psychological health of seniors is important, because the alternative, a tight-knit family, will not be an option for many. This and the knowledge that old age automatically leads to more vulnerability is exactly why many more resources need to be invested in its optimization.

Knowledge is Key

Rather than playing the blame game, it is important to keep in mind that one could probably invent the most intuitive technology for seniors: if fear is their prevailing feeling,

[14] In this text, we are not referring to patients with dementia or other strong impairments that make the use of a smartphone impossible.
[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5712846/
[16] ibid.
[17] https://www.theguardian.com/commentisfree/2018/jul/01/smart-home-devices-internet-of-things-domestic-abuse
[18] https://www.itpro.co.uk/internet-of-things-iot/30844/what-the-internet-of-things-iot-means-for-data-security

reaching them will be rather difficult. In Germany, for instance, citizen initiatives are launched, because the closing of local banks upsets many people.[19] You can of course decide how much digitalization you want to have within your own four walls, but sometimes you have to leave those four walls to transfer money at your local bank. If you find that this bank was closed, because you were one of its few clients left, and you have never heard of computers, don't have children, and are too afraid to ask someone for help – you will most probably find yourself in a precarious situation. It is therefore necessary to start broad information campaigns and try to reach seniors who have only restricted ways to attain a greater knowledge of technology they could integrate into their everyday lives at home.

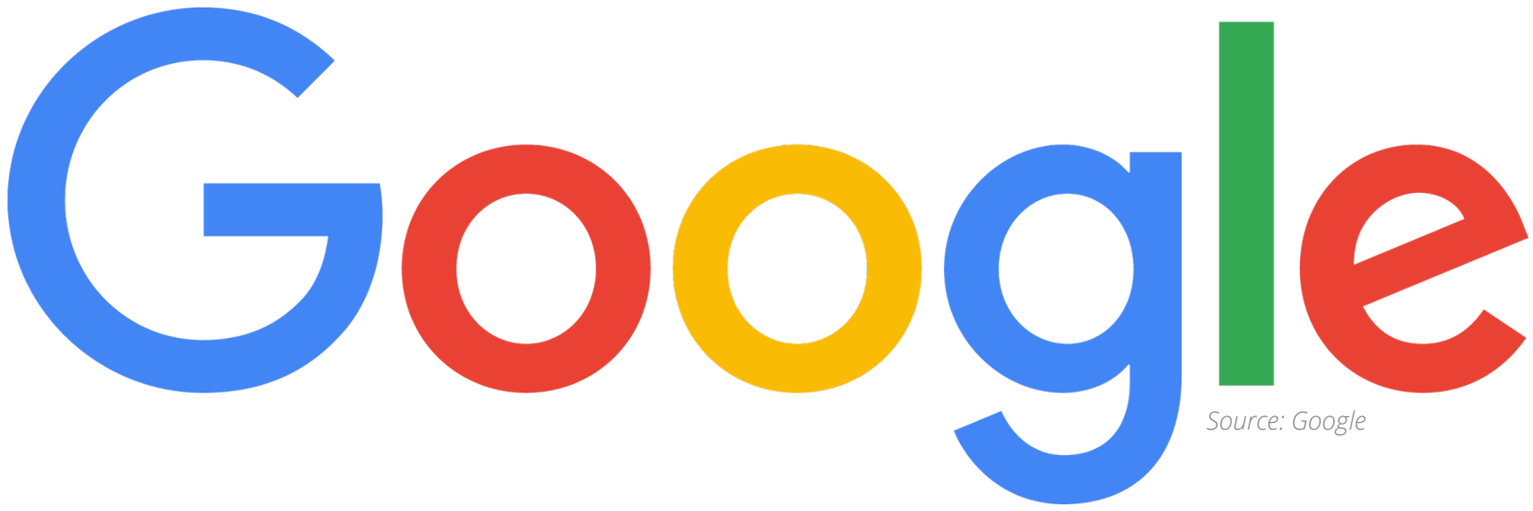
Also, what better place could there be to teach seniors some digital basics than in nursing homes? In a nursing home in Denmark, for instance, the residents are given tablets, and shown how to use them, if necessary. They can stay updated on the meal plans and activities, and the administration of the nursing home is also digitized.[20] This seems like a plausible solution that could be introduced on a broad scale. What would be necessary, though, would probably also be a new self-image of nursing homes. And this is also quite often the sticking point when it comes to technology and digitalization for seniors: It is a development that needs active pushing from many different groups which would have to change their own room for maneuver.

[19] https://www.br.de/nachrichten/bayern/digital-abgehaengt-computerzwang-ueberfordert-viele-senioren,QmIZ1d3
[20] http://www.nordiclabourjournal.org/i-fokus/in-focus-2016/digitisation/article.2016-10-11.7998086264

Technology for Seniors: Not a Question to be Ignored

As paradoxical as it is: Most of the technology for seniors was not designed with seniors in mind. What we deal with is rather a situation in which seniors find themselves confronted with technology. It is often fear that prevents them from learning more about it, and to finally dare to deal with it. Perhaps one day there will be no need to control any devices, but such a reality would come with a plethora of unwanted implications. What's the alternative? In a world where the status of families is gradually eroding, we cannot rely on them like before. The elderly who are afraid of technology can only be reached if actively approached. Politics, science, and nursing homes need to play a much stronger role than before in achieving that goal. This is not only about reacting ad hoc, it is a question that runs deeper: How do we treat people when they cannot provide economic surplus value for society anymore? It is about the general worth we assign to humans.

We also cannot "hope" that the problem will vanish one day with the deaths of the seniors. This is not a tolerable solution by any means: Firstly, there are too many seniors who are afraid of technology, and the disadvantages for them can become a major problem with the advancing digitalization. Secondly, life expectancy in most countries constantly increases. We can expect the drawbacks from lacking digital literacy to stay an important topic for many years, if not one or two decades, to come. That is also the period during which the basis for the technology for future seniors will be laid. Thus even for people less altruistic, the topic of technology for the elderly should be very important.



Source: Google

Lisa Damerow

A History Lesson in Google

Nearly everybody knows the world's most popular search engine (which holds about 70%[1] of the search market share) with six colored letters and uses it on a nearly daily basis. We don't "look for something" anymore, we "google it". But how much do we really know about the website that allows us to find nearly everything on the Internet with just a few keywords? We will take you on a journey through the name and logo history of Google and show you where it all started.

[1] https://www.reliablesoft.net/top-10-search-engines-in-the-world/

In 1996, Larry Page and Sergey Brin, both students at Stanford University in California, created a search algorithm. Their idea was to improve conventional search engines, which listed results by the amount of times a keyword would appear on the page. Instead, Page's and Brin's technology, named "PageRank", determined a website's relevance by the number of pages as well as their importance. The search engine itself was originally nicknamed "BackRub", because the system checked backlinks to calculate their importance. That name (luckily) did not last, however, and by 1997 it was renamed to "Google", which originates from a misspelling of the word "googol" and refers to the number represented by a 1 followed by one-hundred zeros or 10100. "We chose our system's name because it fits well with our goal of building very large-scale search engines", Page and Brin wrote in an original paper on "PageRank".

The initial Google logo was created using Microsoft Word and did not look very impressive at all. In 1998, Google received its first "real" logo using the free graphics program GIMP. An exclamation mark was added behind the already fairly recognizable logo to mimic "Yahoo!". As the search engine became more popular, its creators decided to upgrade its branding. In 1999, they called upon the services of graphic designer Ruth Kedar who designed a variety of concepts for the now-famous logo. "The idea was, 'Can we create the sense of playfulness without having recognizable or identifiable objects that are going to end up limiting us?'", Kedar explained in a 2008 interview with Wired.[2] The final chosen design was used from 1999 to 2010 and accompanied Google to the top of the search engine market. "There were a lot of different color iterations," Kedar said in that same interview. "We ended up with the primary colors, but instead of having the pattern go in order, we put a secondary color on the L, which brought back the idea that Google doesn't follow the rules." In the following years, the logo was changed ever so slightly by gradually removing more of the shading as well as flattening the letters. In 2015, however, the logo changed dramatically to the one we know today – while the pattern stayed the same, the typeface was changed from "Catull" to "Product Sans" (see the image above). It also came with the famous rainbow G that is used mainly for icons and such.

Source: Google

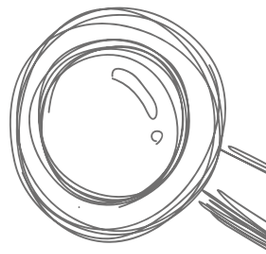
[2] https://www.wired.com/2008/03/gallery-google-logos/


Result
25%
30%
25%
20%
AUDIT
Quality
Accounting
Annual
Procedure
External
Evaluation
AUDIT
Assessment
Internal
Cost
Re-audit
Avanue
Finance
double check
Control
Revenue
Q1 Q2 Q3 Q4
Leader
PLANS

Unified Audit Trail Records to Syslog

Skant Gupta

The main purpose of auditing is to record the configured database actions being performed by users on different databases. Starting from Oracle 18c, and unlike previous releases, DBAs can make use of SIEM (System Information and Event Management) tools to centrally collect and write the audit data logs to Microsoft Event Viewer or the UNIX . This integration will simplify the lives of many users as they will have a better control over the Unified Audit logs with the introduction of this new feature. Oracle data pump files will be written with the unified audit trail data that is imported or exported using the audit operations, i.e. you need not manually create data pump files for audit records.



Users have a choice to enable or disable the Unified Auditing feature on both Windows as well as UNIX operating systems. If you enable this feature in the Windows OS, your logs would be written into the Windows Event Viewer. With UNIX you will also have an option to fine-tune the captured unified audit trail records for syslog.

Unified Audit Trail Records to Syslog: Example

This example provides a step-by-step demonstration of the tasks required to configure unified audit trail records to syslog in the Oracle 18c database.

Assumptions:

- Oracle 18c Container Database (TESTDB) already installed
- Two PDBs (PDB$SEED & PDB18C) are already configured

a. Invoke SQL*Plus and log in to the database as the SYS user in TESTDB at CD B level and to write unified audit trail records to the UNIX syslog. Set the UNIFIED_AUDIT_SYSTEMLOG parameter.

```
SQL> sqlplus / AS SYSDBA

SQL> SHOW PARAMETER unified_audit_systemlog

NAME                           TYPE        VALUE
------------------------------ ----------- ------------
unified_audit_systemlog        string
```

Syntax

```
UNIFIED_AUDIT_SYSTEMLOG = 'facility_clause.priority_clause'
```

- Here, **Facility_clause** refers to the facility where you will write the audit trail records. USER and LOCAL are the two valid choices for this option. While selecting LOCAL, you need to append [0–7] to designate a local custom facility for the syslog records.

- **Priority_clause** refers to the type of warning in which you want to categorize the record. NOTICE, INFO, DEBUG, WARNING, ERR, CRIT, ALERT, and EMERG are amongst some of the valid choices available under this clause.

```
SQL> ALTER SYSTEM SET unified_audit_systemlog = 'LOCAL6.NOTICE' SCOPE = SPFILE;
System altered.
```

b. Configuration of syslog should be done using the root user. Set „local6.notice" and pair it with the LOG file „/var/log/audit_oracle.log". This is entered in the configuration file „/etc/rsyslog.conf" or „/etc/syslog.conf". After the change, only the syslog deamon starts and the configuration in the operating system is complete.

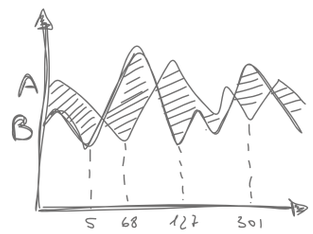
```
[oracle@Testdb ~]$ cat /etc/rsyslog.conf|grep -i oracle
#ORACLE UNIFIED AUDITING
local6.notice /var/log/audit_oracle.log

[root@Testdb ~]# service rsyslog restart
Shutting down system logger:                               [OK]
Starting system logger:                                    [OK]

[root@Testdb ~]# ls -lrt /var/log/audit_oracle.log
-rw------- 1 root root 0 Aug 11 08:26 /var/log/audit_oracle.log
```

c. Restart the database to get effect of parameter.

```
[oracle@Testdb ~]$ sqlplus / AS SYSDBA

SQL> SHUTDOWN IMMEDIATE;
Database closed.
Database dismounted.
ORACLE instance shut down.
SQL> STARTUP
ORACLE instance started.

Total System Global Area   2768239832  bytes
Fixed Size                    8899800  bytes
Variable Size               704643072  bytes
Database Buffers           1979711488  bytes
Redo Buffers                 74985472  bytes
Database mounted.
Database opened.
SQL> SHOW PARAMETER unified_audit_systemlog

NAME                                 TYPE         VALUE
------------------------------------ -----------  -------------
unified_audit_systemlog              string       LOCAL6.NOTICE
```

d. Now we can stop the PDB and read the syslog from OS level.
e. As we verify the result from syslog., we take the value of action

```
SQL> ALTER PLUGGABLE DATABASE pdb18c CLOSE;
Pluggable database altered.

SQL> host more /var/log/audit_oracle.log
Aug 11 08:26:56 Testdb Oracle Unified Audit [11509]: LENGTH: ‚158'
TYPE:"4" DBID:"2767052598" SESID:"1496083367" CLIENTID:"" ENTRY-
ID:"1" STMTID:"5" DBUSER:"SYS" CURUSER:"SYS" ACTION:"227" RET-
CODE:"0" SCHEMA:"" OBJNAME:"PDB18C"
```



and STMTID and SESID to verify from database unified audit trail.

```
SQL>  SELECT * FROM audit_actions WHERE action = 227;
      ACTION NAME
---------- --------------------------
      227  ALTER PLUGGABLE DATABASE

SQL> SELECT os_username, dbusername, client_program_name, au-
dit_type FROM unified_audit_trail WHERE sessionid =1496083367 AND
statement_id = 5;

OS_USERNAMEDBUSERNAME  CLIENT_PROGRAM_NAME   AUDIT_TYPE
---------------------  --------------------------- ----------
Oracle   SYS    sqlplus@Testdb (TNS V1-V3) Standard
```

f. In an Oracle Multitenant environment, the parameter "UNIFIED_AUDIT_SYSTEMLOG" must be set in every pluggable database. In Oracle RAC environment set this parameter to the same value on each Oracle RAC instance.

```
SQL> SHOW PARAMETER unified_audit_systemlog
NAME                           TYPE         VALUE
------------------------------ -----------  -----------
unified_audit_systemlog        string

SQL> ALTER SYSTEM SET unified_audit_systemlog = 'LOCAL6.NOTICE'
scope = spfile;
System altered.

SQL> STARTUP FORCE
Pluggable Database opened.
SQL> SHOW PARAMETER unified_audit_systemlog
NAME                           TYPE         VALUE
------------------------------ -----------  -----------
unified_audit_systemlog        string       LOCAL6.NOTICE
```

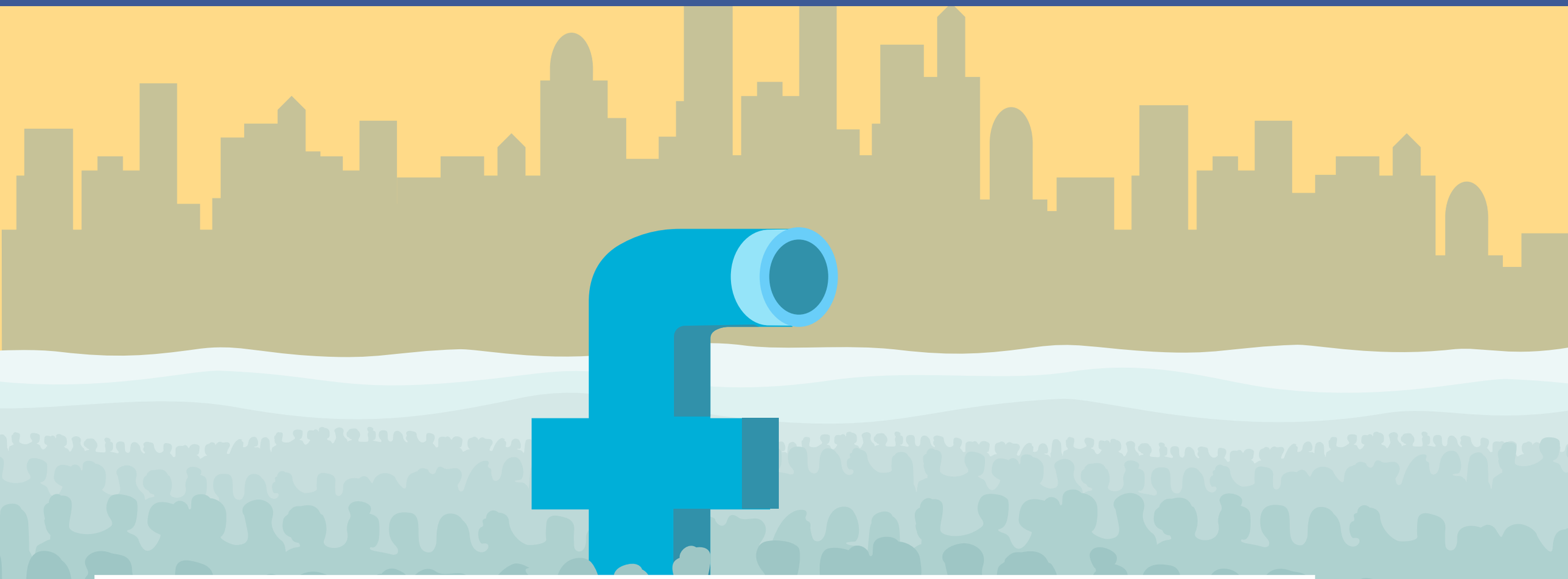
Summary

With the above example, it is evident that starting from Oracle 18c, unified auditing syslog integration has filled a void that was preventing many DBAs from using unified auditing. Further, this will prove as a beneficial feature modification for centrally collecting all information from the unified audit trails of the databases. One can always use Oracle Audit Vault and Database Firewall. Moreover, Oracle Audit Vault and Database Firewall has excellent syslog integration, which can be effortlessly controlled via a set of rules.

Skant Gupta
Oracle Cloud Consultant

Sanela Lukavica

Number of the Month: 87 million



The Connection Between Privacy Infringements and Ethical Implications of Artificial Intelligence

Sanela Lukavica

Number of the Month: 87 million

There has probably not passed a month without news about leaks of Facebook user data. The numeric heights reached are “impressive”, so much so that we could hardly choose which figure to present to you as our number of the month. We finally opted for 87 million: Facebook shared this amount of users’ data with the British consulting firm Cambridge Analytica in the years 2010 to 2015, as revealed in early 2018.[1] This took the cake, and even trumped the theft of the data of 29 million Facebook users in 2018 by hackers.[2]

The latter incident was the last straw that led to the current investigations of the Federal Trade Commission. While the exact height of the pending fine for the infringements is still being negotiated between Facebook and the FTC, it is expected to exceed the heretofore record-breaking $22.5 million penalty on Google in 2012.[3]

Mark Zuckerberg has made a pledge to betterment lately with his blog post on Facebook’s future endeavours in the realm of privacy,[4] scathingly baptized as “manifesto”, and called a mere “PR stunt”[5] by the press. Let’s see what the future brings. As for the time being, Facebook has donated € 6.5 million to the new Institute for Ethics in Artificial Intelligence at the Technical University of Munich, so that it can conduct its research on ethical implications of artificial intelligence.[6]

[1] https://www.theguardian.com/news/2018/mar/17/cambridge-analytica-facebook-influence-us-election
[2] https://newsroom.fb.com/news/2018/10/update-on-security-issue
[3] https://www.theverge.com/2019/2/14/18225440/facebook-multibillion-dollar-ftc-fine-privacy-violations
[4] https://www.facebook.com/notes/mark-zuckerberg/a-privacy-focused-vision-for-social-networking/10156700570096634/?mod=article_inline
[5] https://mashable.com/article/roger-mcnamee-criticizes-mark-zuckerberg-privacy-manifesto-sxsw/?europe=true#uzDnqpdptPqm
[6] https://www.tum.de/en/about-tum/news/press-releases/detail/article/35188

The Best of Browser Extensions

Martin Meyer

Browser add-ons can increase the functionality of browsers like Chrome, Firefox, and Safari by providing features not included by the original developers. Many browser extensions are aimed at improving your online security, while others add new core features or analyze and tweak websites. We have chosen some browser extensions which may be interesting for private users as well as some for professional users.

Video DownloadHelper

If you want to watch videos not only online, but also on the train, in the car or on the plane, Video DownloadHelper is the perfect solution. The add-on is available for both Firefox and Chrome.

Every single video you find on the internet can be downloaded with just one click. So the eternal search for similar videos or downloaders is history and you can view web content even without the internet.

The utility supports well-known video portals and many other websites. Because Google does not allow extensions that can download YouTube videos, the app provider has removed support for YouTube from the Chrome version.

The add-on is free of charge. But only in the paid Pro version the software can download unlimited streams, remove watermarks, and convert videos directly into audio-only files.

WhatsApp Desktop for Firefox

With the free "WhatsApp Desktop extension" for Firefox, Chrome and Opera, you always have your WhatsApp chats in view. The free Firefox and Chrome add-on packs the official WhatsApp web app into a smaller window that you can quickly open from the toolbar of your browser. This means that you no longer have to keep WhatsApp open in a separate tab to receive messages.

You'll also be automatically notified of new messages from Google Chrome.

Windows Defender Browser Protection

With Windows Defender Browser Protection, Microsoft's virus scanner now also protects Google Chrome against phishing and infected websites.

The extension provides Microsoft Smartscreen Protection for Chrome. Chrome's Safe Browsing already provides surf protection, but you can try Defender as an extension very easily, and unlike several virus scanners, the surf protection measures should not get in each other's way.

Awesome Screenshot

With the extension Awesome Screenshot for Chrome and Firefox you can create and edit screenshots.

A click on the icon of the Google Chrome extension reveals several options. So you have the choice whether you want to photograph the entire website, only the visible area, or a self-chosen part. There is also a kind of self-timer that takes a screenshot after three or five seconds.

You will then be taken to an editing window where you can add markers and texts to the screenshot. In the next and last step you save the image on your computer, put it on the clipboard or move it to your cloud.

LastPass

You have a lot of accesses and mailboxes and can't remember all your passwords, or you don't want to use the same passwords all the

time and therefore take security risks? You don't trust the password memory in your browser setting or you dislike that all passwords are only stored in the browser and are therefore usually only retrievable from the home PC? The solution can be a password manager!

A well-known solution is LastPass. The LastPass Vault lets you add websites and more, and view and manage your stored data. The extension requires at least twelve characters, uppercase and lowercase as well as a number. The service also offers a recommendable 2-factor authentication for your login. LastPass performs a security check for passwords and also points out duplicate passwords.

The service is available for all common browsers on all operating systems (Mac, Windows, Linux) and synchronizes well with Android and iOS. It offers all the conveniences, such as unlocking via Touch ID and recently also Face ID (on iPhone X).

LastPass uses AES-256-bit encryption with PBKDF2 SHA-256 and Salted Hashes to ensure maximum security in the cloud.

There are free versions available for private users. The fee-based Pro-versions with some useful extra features are offered for private users (for 3 $/month) as well as for teams in firms or an entire enterprise.

For pros

HTML Validator

You are writing a code for an application and wonder whether it's working? Something seems to be wrong? With HTML Validator it is easy to find errors instantly, instead of a long tedious search in endless lines of HTML code. The extension will analyze the source code of the current page, highlighting and list any HTML errors or warnings. The number of errors of a HTML page is seen on the form of an icon in the status bar when browsing. The extension is particularly good for finding things like missing end tags, deprecated features and general bad practice. It is also possible to choose between validation algorithms to suit personal needs.

Check My Links

This browser extension for Chrome is able to check every link, both internal and external, on a page for its functionality. So you can easily find broken links without having to click on each one. A report function shows good and bad links on the page after the scan using a color code. It is also possible to copy all bad links to your clipboard with just a click! "Check My Links" is an extension developed primarily for web designers, developers and content editors.

ColorZilla

ColorZilla is a very popular extension appreciated all over the world.

It is very easy to use and gives a lot of information about the colors used on a webpage. You like a color on a site and you want to use it, too? ColorZilla includes a Color Picker, Eye Dropper, Gradient Generator and many additional advanced color tools for making the life easier for web developers and graphic designers with color related tasks.

The Color Picker looks even similar to ones that can be found in professional programs like Photoshop and Paint Shop Pro.

An Auto copy function allows to copy the generated or sampled colors to the clipboard in CSS RGB, Hex and other formats. ColorZilla also displays element information like tag name, class, id, size.

With its good functionality and great ease of use, Color Picker is a recommendable extension for Chrome and Firefox browser.

Sanela Lukavica

IT Problems can be a Hassle!

Admittedly, fixing an IT problem through the phone is pretty much comparable to looking for a needle in a hay stack: It can be a question of sheer luck and leave you empty-handed for all your efforts. You will understandably try your best to frame the problem, and if your frame is rather large, you might start at the shallow end and work your way forward. The two guys from the video seem to have a different take on things...But see for yourself!

Richard Foote

Importance of Data Clustering

When it comes to application performance within the Oracle Database, one of the more important considerations is Data Clustering. Which is interesting, as many DBAs and Developers simply don't consider the clustering of their data at all when inserting data in database tables. In this article, we'll look at two classic scenarios where data clustering can be problematic and how Oracle Database 12c has made addressing these issues much easier.

We'll start with one of the most common performance issues I encounter. Let's just create a simple table and procedure to populate the table with a sequence on the ID column:

```
SQL> create table bowie_assm (id number, name varchar2(42));

Table created.

SQL> create sequence bowie_assm_seq order;

Sequence created.

SQL>  create or replace procedure pop_bowie_assm as
  2  begin
  3  for i in 1..100000 loop
  4  insert into bowie_assm values (bowie_assm_seq.nextval, 'DAVID BOWIE');
  5  commit;
  6  end loop;
  7  end;
  8  /
Procedure created.

--- run the pop_bowie_assm procedure in 3 different, concurrent sessions…
SQL> create index bowie_assm_id_i on bowie_assm(id);
Index created.
SQL> exec dbms_stats.gather_table_stats(ownname=>null, tabname=>'BOWIE_ASSM');
PL/SQL procedure successfully completed.
```

Importantly, we run the pop_bowie_assm procedure concurrently in 3 different sessions. Because the ID column is populated via an ordered sequence, one would think perhaps that the data within the table would be reasonably well ordered and clustered. However, if we look at the Clustering Factor (CF) of index on the ID column:

We notice that the CF of the index is actually very poor at **217236**.

So what is the CF, how is it calculated and why is a value of 217236 considered poor in this example?

The CF determines how well the data in the table is clustered in relation to the index. The data within an index is always sorted in relation to the indexed data but the data within the table could potentially be sorted and clustered in anyway.

To calculate the CF, Oracle basically goes to the first index entry within the index and determines (via the associated index entry Rowid) the physical block location of the corresponding row in the table. It then looks at the second index entry and determines if its corresponding row resides in a different block within the table to the previous index entry. If the table block differs, the CF is incremented. If the table block is the same as the previous index entry, the CF is not incremented. Oracle then checks the Rowid of the third index entry to see if the corresponding row resides in the same table block as the previous second index entry. Again, if it differs, the CF is incremented, if it doesn't differ then the CF is not incremented. This process is repeated for each index entry in the index (or a sample thereof), with the CF incremented if the physical block location of the corresponding table row differs from that of the previous index entry.

```
SQL> SELECT t.table_name, i.index_name, t.blocks, t.num_rows, i.clustering_factor
     FROM user_tables t, user_indexes i
     WHERE t.table_name = i.table_name AND i.index_name='BOWIE_ASSM_ID_I';

TABLE_NAME INDEX_NAME            BLOCKS      NUM_ROWS    CLUSTERING_FACTOR
---------- --------------------- ----------  ----------  -----------------
BOWIE_ASSM BOWIE_ASSM_ID_I       1000        300000      217236
```

In a scenario where the data in the table is clustered in a perfect, identical manner in relation to the index, the CF has a value that approaches the number of blocks in the table (as the CF is rarely incremented only when a next table block is visited). In a scenario where the data in the table is ordered in a manner totally different to that of the index, the CF has a value that approaches the number of index entries (as the CF is incremented for each index entry as the corresponding table block is never the same as that referenced in the previous index entry). The CF sits somewhere between these two extremes, but usually somewhere closer to one of these two extremes (and usually closer to a "bad" CF).

The CF is **THE** most important statistic regarding how the Cost Based Optimizer (CBO) calculates the cost of an execution plan.

If an index had to say retrieve 100 rows and if the index has a very good CF then it's possible the index only has to visit a couple of different table blocks to get the necessary 100 rows of data. However, if the index has an extremely poor CF, then it's possible the index must visit 100 different table blocks to get the necessary data. This makes the index much less efficient.

In the example above where there are 1000 blocks in the table and the index has 300000 index entries, a CF of 217236 is indeed a relatively poor CF value.

If we run a query in which only a relatively small percentage of rows are accessed (just 388 rows, approx. 0.13% of data):
We notice the CBO has decided to choose a Full Table Scan (FTS) to retrieve this relatively small number of rows. The index is just too inefficient as it's more efficient to read the entire table via a FTS (that uses larger, more efficient multiblock reads) than to read the 388 rows by basically having to visit too many different table blocks via less efficient single block accesses.

However, this CF value of 217236 seems to be rather high for a column that has been entered in the table basically in ID order. Why is the CF so poor?

The issue here is a combination of how the CF is calculated by default and that the table has been created in an Automatic Segment Space Management (ASSM)

```
SQL> select * from bowie_assm where id between 42 and 429;

388 rows selected.

Execution Plan
----------------------------------------------------------------------------------------------------
| Id  | Operation           | Name          | Rows  | Bytes     | Cost (%CPU)     | Time      |
----------------------------------------------------------------------------------------------------
|   0 | SELECT STATEMENT    |               | 389   |   6613    |     275   (2)   | 00:00:01  |
|*  1 | TABLE ACCESS FULL   | BOWIE_ASSM    | 389   |   6613    |     275   (2)   | 00:00:01  |
----------------------------------------------------------------------------------------------------

Predicate Information (identified by operation id):
---------------------------------------------------
  1 - filter("ID"<=429 AND "ID">=42)

Statistics
---------------------------------------------------
       0   recursive calls
       0   db block gets
     949   consistent gets
       0   physical reads
       0   redo size
    4094   bytes sent via SQL*Net to client
     608   bytes received via SQL*Net from client
       2   SQL*Net roundtrips to/from client
       0   sorts (memory)
       0   sorts (disk)
     388   rows processed
```

tablespace.

One of the nice advantages of an ASSM tablespace is that it avoids possible contention by directing different sessions when inserting data to different table blocks below the segment Highwater Mark (HWM). This helps to avoid hot table blocks, which can be especially problematic in RAC environments.

However, this has the unfortunate side-effect of impacting the calculated CF of index. In the above example where 3 different sessions insert concurrently into the table, they all insert into different blocks. This means for example that the rows with ID values 1,4,7,10,13 are inserted into one block, rows with ID values 2,5,8,11,14 are inserted into another block and rows with ID values 3,6,9,12,15 are inserted into yet another block. When calculating the CF, this results in a CF value of 15 for these 15 rows, as each ordered row resides in a different block to the previous value. However, only 3 different blocks are actually used to store all these rows. The calculated CF is being calculated as being much worse than it really is with the data being relatively well ordered.
This has always been an issue, with the CF calculation not taking into consideration table blocks that it might previously have only just visited in previous index entries. Only taking note of the table block visited by the previous index entry can result in data that is reasonably well clustered being incorrectly recorded as having an extremely poor CF value. This is especially problematic with ASSM tablespaces now the default, although many DBAs and Developers are oblivious to this issue.

The good news is that with the release of Oracle Database 12.1 (and backed ported all the way to 11.2.0.7), Oracle introduced a solution to this issue. A new statistics collection preference **TABLE_CACHED_BLOCKS** can be set between 1 (default) and 255 to denote how many previous table block accesses to ignore before incrementing the CF. If TABLE_CACHED_BLOCKS is set to say 42, the CF is not incremented if the table block associated with the current index entry Rowid was one of the last 42 table blocks previously referenced.

If we now re-collect index statistics with the TABLE_CACHED_BLOCKS preference set to 42:
We notice the CF value has now reduced significantly from a value

```
SQL> exec dbms_stats.set_table_prefs(ownname=>user, tabname=>'BOWIE_ASSM', pname=>'TABLE_CACHED_BLOCKS', pvalue=>42);

PL/SQL procedure successfully completed.

SQL> exec dbms_stats.gather_index_stats(ownname=>user, indname=>'BOWIE_ASSM_ID_I',
      estimate_percent=> null);

PL/SQL procedure successfully completed.

SQL> SELECT t.table_name, i.index_name, t.blocks, t.num_rows, i.clustering_factor
    FROM user_tables t, user_indexes i
    WHERE t.table_name = i.table_name AND i.index_name='BOWIE_ASSM_ID_I';

TABLE_NAME INDEX_NAME              BLOCKS      NUM_ROWS     CLUSTERING_FACTOR
---------- ----------------------  ----------  ----------   -----------------
BOWIE_ASSM BOWIE_ASSM_ID_I         1000        300000       909
```

of **217236** to just **909**. The important point here is that the 909 value is a much more accurate CF value and one which more accurately denotes the actual clustering characteristics of the ID column.

We notice the CBO is no longer selecting a FTS, but the ID index. Most importantly, this is the better, more efficient plan as evidenced by the fact the number of consistent gets has reduced significantly from **949** to just **6**.

By setting the TABLE_CACHED_BLOCKS preference judiciously (note ASSM replicates 16 freelists so a default of 16 is likely to be better than 1), the CF is calculated more accurately and the CBO will automatically make better choices on when to use/not use indexes. TABLE_CACHED_BLOCKS can be set by DBMS_STATS.SET_TABLE_PREFS, DBMS_STATS.SET_SCHEME_PREFS, DBMS_STATS.SET_DATABASE_PREFS,

Let's look at a different example where data is genuinely not "well clustered". In this example, we have a DOB column, in which specific dates are effectively spread out across blocks throughout the entire table:

The CF value for the DOB index is extremely poor, with

```
SQL> create table major_tom (id number, DOB date, text varchar2(42));

Table created.

SQL> insert into major_tom select rownum, sysdate-trunc(dbms_random.value(0, 20000)), 'DAVID BOWIE' from dual connect by level <= 2000000;

2000000 rows created.

SQL> commit;

Commit complete.

SQL> create index major_tom_dob_i on major_tom(dob);

Index created.

SQL> EXEC dbms_stats.gather_table_stats(ownname=>user, tabname=>'MAJOR_TOM', estimate_percent=> null, method_opt=>'FOR ALL COLUMNS SIZE 1');

PL/SQL procedure successfully completed.

SQL> SELECT t.table_name, i.index_name, t.blocks, t.num_rows, i.clustering_factor
    FROM user_tables t, user_indexes i
    WHERE t.table_name = i.table_name AND i.index_name='MAJOR_TOM_DOB_I';

TABLE_NAME    INDEX_NAME       BLOCKS      NUM_ROWS    CLUSTERING_FACTOR
------------  ---------------  ----------  ----------  -----------------
MAJOR_TOM     MAJOR_TOM_DOB_I  9077        2000000     1988249
```

```
SQL> exec dbms_stats.set_table_prefs(ownname=>user, tabname=>'MAJOR_TOM', pname=>'TABLE_CACHED_BLOCKS', pvalue=>255);

PL/SQL procedure successfully completed.

SQL> EXEC dbms_stats.gather_index_stats(ownname=>user, indname=>'MAJOR_TOM_DOB_I', estimate_percent=> null);

PL/SQL procedure successfully completed.

SQL> SELECT t.table_name, i.index_name, t.blocks, t.num_rows, i.clustering_factor
  2   FROM user_tables t, user_indexes i
  3   WHERE t.table_name = i.table_name AND i.index_name='MAJOR_TOM_DOB_I';

TABLE_NAME    INDEX_NAME       BLOCKS      NUM_ROWS    CLUSTERING_FACTOR
------------  ---------------  ----------  ----------  -----------------
MAJOR_TOM     MAJOR_TOM_DOB_I  9077        2000000     1941536
```

a value of **1988249** being much closer to the number of index entries (2000000) than the number of blocks within the table (9077).

We now have a technique to improve the CF by setting the TABLE_CACHED_BLOCKS statistics preference. To improve this CF as much as possible, let's re-collect the index statistics with TABLE_CACHED_BLOCKS set to the maximum value of 255.

We notice the CF value has only improved marginally from **1988249** down to **1941536**, despite TABLE_CACHED_BLOCKS set to the maximum 255 value. This is because the DOB really is very poorly clustered within the table and the TABLE_CACHED_BLOCKS has little impact. With such poor clustering, the Rowid of index entry is still likely to access a table block that wasn't one of the previous 255 table blocks last referenced. The fact the CF has not improved significantly is a good thing, as we want the CF to be as accurate as possible and not simply be artificially reduced.

If we run a query with a filtering predicate based on the DOB column that selects just 2955 rows from the 2000000 row table (approx. 0.15% of the data):
The CBO chooses a FTS access path, primarily because the DOB

```
SQL> select * from major_tom where dob between '01-JUN-2017' and '30-JUN-2017';

2955 rows selected.

Execution Plan
----------------------------------------------------------------------------
| Id| Operation           | Name       | Rows  | Bytes | Cost (%CPU)| Time     |
----------------------------------------------------------------------------
|   0 | SELECT STATEMENT  |            | 3100 | 77500 | 2484 (1)   | 00:00:01 |
|*  1 | TABLE ACCESS FULL | MAJOR_TOM  | 3100 | 77500 | 2484 (1)   | 00:00:01 |
----------------------------------------------------------------------------

Statistics
----------------------------------------------------------
          0  recursive calls
          0  db block gets
       8582  consistent gets
          0  physical reads
          0  redo size
      54489  bytes sent via SQL*Net to client
        608  bytes received via SQL*Net from client
          2  SQL*Net roundtrips to/from client
          0  sorts (memory)
          0  sorts (disk)
       2955  rows processed
```

index is just too inefficient to retrieve the 2955 rows, based on such a poor CF.

What if this query were extremely important to the business and we needed to significantly improve the performance of this query? How can we improve the CF and hence the efficiency of an associated index, when the CF really is very poor due to badly clustered data?

Oracle Database 12.2 has introduced a new capability that makes improving the clustering of data in a table much easier than previously.

The first thing we can do is set a **Clustering Attribute** to the table. This tells Oracle how data is to be clustered following a table reorganisation operation or following a direct load of data into the table. This feature as introduced with Oracle Database 12.1 with the **CLUSTERING BY** clause.

The second step is to perform a re-organisation of the table with an ALTER TABLE MOVE operation. However, this was previously an "Offline" operation (except for Index Organized Tables) in that the table was locked during the MOVE and all indexes became Unusable and had to be rebuilt.

Oracle Database 12.2 has now made this an **ONLINE** operation, with no other transactions locked out during the table reorganisation and with all indexes automatically rebuilt and remaining usable as part of the move. This makes the task of improving the clustering of data within a table a much more simplistic proposition than previously (where DBMS_REDEFINITION could be used for such online operations).
Caution: by changing the table order and improving the CF on one index, you can potentially impact the CF of other indexes. So picking the most appropriate column(s) to cluster is vitally important.

In the following, we set the Clustering Attribute to the DOB column and then perform an Online reorganisation of the table:
We notice the CF of the DOB index has improved significantly

```
SQL> alter table major_tom add clustering by linear order(DOB);

Table altered.

SQL> alter table major_tom move online;

Table altered.

SQL> SELECT t.table_name, i.index_name, t.blocks, t.num_rows, i.clustering_factor
     FROM user_tables t, user_indexes i
     WHERE t.table_name = i.table_name AND i.index_name='MAJOR_TOM_DOB_I';

TABLE_NAME  INDEX_NAME             BLOCKS     NUM_ROWS    CLUSTERING_FACTOR
----------  ---------------------- ---------- ----------  -----------------
MAJOR_TOM   MAJOR_TOM_DOB_I        9077       2000000     8445
```

from the previous **1941536** to a perfect **8445**. This is because the data within the table is now perfectly ordered/clustered based on the DOB column.

If we now run the previous query again:
The query now automatically uses the DOB index, but again

```
SQL> select * from major_tom where dob between '01-JUN-2017' and '30-JUN-2017';

2955 rows selected.

Execution Plan
----------------------------------------------------------------------------------------------------------
| Id  | Operation                           | Name             | Rows  | Bytes |Cost (%CPU)| Time     |
----------------------------------------------------------------------------------------------------------
|   0 | SELECT STATEMENT                    |                  | 3100  | 77500 |  25   (0)| 00:00:01|
|   1 |  TABLE ACCESS BY INDEX ROWID BATCHED| MAJOR_TOM        | 3100  | 77500 |  25   (0)| 00:00:01|
|*  2 |   INDEX RANGE SCAN                  | MAJOR_TOM_DOB_I  | 3100  |       |  11   (0)| 00:00:01|
----------------------------------------------------------------------------------------------------------

Statistics
----------------------------------------------------------
          0  recursive calls
          0  db block gets
         25  consistent gets
          0  physical reads
          0  redo size
      90805  bytes sent via SQL*Net to client
        608  bytes received via SQL*Net from client
          2  SQL*Net roundtrips to/from client
          0  sorts (memory)
          0  sorts (disk)
       2955  rows processed
```

the most important aspect is that the index does now indeed offer a much more efficient access path with consistent gets significantly reduced from **8582** to just **25** when retrieving the 2955 rows.

Summary

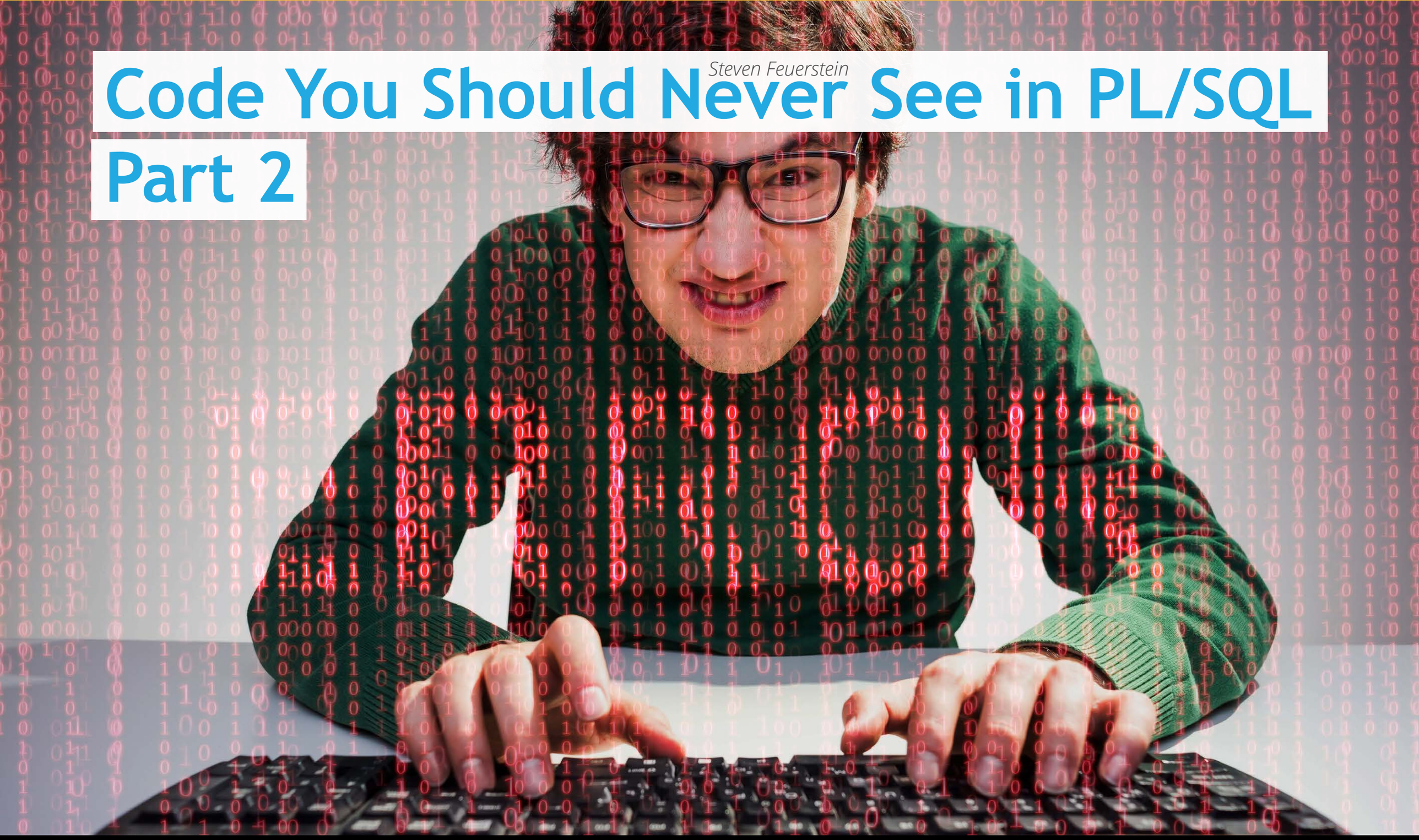
If you have an index with a poor CF, it could be because:

1. The data is reasonably well clustered but because ASSM slightly changes the ordering of data within the table and the default way the CF is derived, causes a poor CF value to be calculated during statistics collection
2. The data really is poorly clustered in the table in relation to the associated index and so the CF value accurately reflects the inefficiency of the associated

If 1. is the reason for the poor CF, setting the TABLE_CACHED_BLOCKS preference to a more suitable value than the default of 1 (I recommend 16 as a much better default) will significantly improve the CF to a much more appropriate value.
If 2. is the reason for the poor CF and you're on Oracle 12.2 or above, setting an appropriate Clustering Attribute to the table and performing an Online table reorganisation will significantly improve the CF and efficiency of the associated index.

Code You Should Never See in PL/SQL Part 2

Steven Feuerstein



This is the second part of our new series by Steven Feuerstein. Enjoy!

Select from DUAL for....just about anything

A long, long time ago, before PL/SQL was all grown up, it didn't have native implementations for some SQL functions like SYSDATE. So developers would use a „dummy" SELECT against a pre-defined table like DUAL in order to fall back on the SQL engine to get the job done, as in:

Bad Code

```
DECLARE
  l_now DATE;
BEGIN
  SELECT SYSDATE INTO l_now FROM dual;
END;
```

Plus, if you wanted to get the next (or current) value of a sequence, you had to call the appropriate function via SQL, like:

```
DECLARE
  l_next_pky INTEGER;
BEGIN
  SELECT my_seq.NEXTVAL INTO l_next_pky FROM dual;
END;
```

Cleaned Up

```
DECLARE
  l_now DATE;
  l_next_pky INTEGER;
BEGIN
  l_now := SYSDATE;
  l_next_pky := my_seq.NEXTVAL;
END;
```

Declaration of FOR loop iterator

When you use a FOR loop (numeric or cursor), PL/SQL automatically declares a variable for the record referenced in that loop, and then releases memory for that variable when the loop terminates. If you declare a variable with the same name, your code will compile, but you could easily introduce bugs into that code as you see below:

Bad Code

In both of the blocks below, the „confirming" call to DBMS_OUTPUT. put_line to confirm that the desired action occurred will never be executed. In the first block, the „indx"referenced in the IF statement resolves to the locally declared variable, which is not the same indx as the loop iterator. It is initialized to NULL and stays that well. Same with the explicitly declared rec variable in the second block.

```
DECLARE
  indx  INTEGER;
BEGIN
  FOR indx IN 1 .. 12
  LOOP
    DBMS_OUTPUT.put_line (TO_DATE ('2018-' || indx || '-01', 'YYYY-MM-DD'));
  END LOOP;

  IF indx = 12
  THEN
    DBMS_OUTPUT.put_line ('Displayed all twelve months!');
  END IF;
  ;
/

DECLARE
  rec   employees%ROWTYPE;
BEGIN
  FOR rec IN (SELECT * FROM employees)
  LOOP
    DBMS_OUTPUT.put_line (rec.last_name);
  END LOOP;

  IF rec.employee_id IS NOT NULL
  THEN
    DBMS_OUTPUT.put_line ('Displayed all employees!');
  END IF;
END;
/
```

Cleaned Up

First step in clean up is to remove the declarations of those unused and unnecessary variables. The next step is for you to decide what logic you need to replace the IF statements after the loops. In the first case, why would I need an IF statement? If I got past the loop without an exception, then I certainly did display all the months.

In the second block, it's a little bit trickier. When I use a cursor FOR loop, the PL/SQL engine does everything for me: open the cursor, fetch the rows, close the cursor. So once the cursor is closed, I have no visibility into what happened inside the cursor. If I want to know whether at least one row was fetched, for example, I need to set a local variable as you see below.

```
BEGIN
  FOR indx IN 1 .. 12
  LOOP
     DBMS_OUTPUT.put_line (TO_DATE ('2018-' || indx || '-01', 'YYYY-MM-DD'));
  END LOOP;

  DBMS_OUTPUT.put_line ('Displayed all twelve months!');
END;
/

DECLARE
  l_displayed BOOLEAN := FALSE;
BEGIN
  FOR rec IN (SELECT * FROM employees)
  LOOP
     DBMS_OUTPUT.put_line (rec.last_name);
     l_displayed := TRUE;
  END LOOP;

  IF l_displayed
  THEN
     DBMS_OUTPUT.put_line ('Displayed all employees!');
  END IF;
END;
/
```

To be continued ...

Steven Feuerstein's Blog
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Interview: Perspectives in the Area of Audit and License Rights

Christian Luda has talked to Dr. Thomas Thalhofer, one of the leading German attorneys in the field of IT law and a member of the DOAG Legal Council. The topic has recently drawn much attention in the international Oracle community and will most probably stay with us for a while. A perfect reason to recap the current situation and future perspectives!

Dr. Thalhofer, how is the awareness in German companies regarding audits?
This varies significantly from company to company. In large companies, there frequently are specialized license managers and departments who keep an exact record on license terms. They keep an eye on these things and are generally well-prepared for audits. These departments know when to expect an audit and the cost risks involved can be estimated well in advance – this is also thanks to working with software-supported license management tools. There are many companies that are well positioned.

In small and medium companies, this is entirely different. These companies are often overwhelmed by the complexity of license contracts and, due to an insufficient license management, they are badly or not at all prepared for audits so that they are frequently surprised by audit requests and even panicking in some cases.

Do companies tend to over-license for fear of an audit?
As a matter of fact, this can occur, but these are rather individual cases in my opinion. More frequently, I see that companies over-license one product and under-license another. In most cases, this is not an evil intent with the purpose of copyright infringement. Some companies are not well-prepared in their license management, do not completely grasp the complexity of license contracts, and then have too many licenses of one type and not enough of another. Unfortunately, you cannot settle this circumstance when a provider requests an audit. Instead, the under-licensing must still be corrected – at the company's expense.

Does it occur often, from your point of view, that contracts include an unreasonable disadvantage? And, if yes, does this rather affect small companies that have poorer legal consultation?
That is an interesting question. We concentrate on standard contracts in the IT field and it really is surprising that these

Dr. Thomas Thalhofer
Attorney, Member of the DOAG Legal Council

contracts of large software vendors are often a problem and include conditions that imply an unreasonable disadvantage. Oracle's audit clause, for example, is without cause: It permits an audit at any time with unrestricted frequency, even when there is absolutely no suspicion of copyright infringement. Additionally, there are no measures regarding protection of personal data and business secrets. You will find many experts in legal literature who consider this ineffective. But, certainly, you mention it, particularly small and medium-sized companies do not go that much into legal detail so that many contracts and contractual conditions are often left as they are without checking their legal effectiveness. Especially in the IT field, there are numerous regulations that were not enforceable in court. But in contractual practice, these regulations between companies are applied because the check for unreasonable disadvantage and resulting ineffectiveness is not even carried out on licensee side.

What must be considered in an audit regarding company secrets and data protection?

In case of data protection, we have the General Data Protection Regulation (GDPR) since 25 May 2018 as a new, very strict harmonized regulation throughout Europe that must be adhered to by all companies in the EU. When you, as a licensee, grant access to a software company to your systems in the scope of an audit and this leads to this software company viewing your personal data or even transmitting this data in combination with audit data to its systems, then this is, first of all, data processing that must be justified in accordance with the GDPR. If you let this check in terms of data protection, this will frequently have the result that such a justification for a data transmission to a third party is not accepted. Thus, the licensee would commit a data protection infringement.

Two aspects must be considered in case of company and business secrets: When there are company secrets of third parties on the systems e.g. documents that are subject to a non-disclosure agreement with a contract partner, there is a risk that the licensee violates this agreement and, in so doing, is liable to damages or even has to pay a contractual penalty – depending on the conditions of the applicable non-disclosure agreement.

A drain of business secrets to the software licenser may also be undesirable in individual cases. The software usage – provided it does not affect the license agreement – may also be a business secret that you may not want to disclose to everyone. Therefore, the protection of business secrets is an important field that requires rules for the audit.

Is it also possible that a company could avoid an audit by referring to data protection and company secrets?

Yes, that may be a defense strategy. However, the result will be that the software companies take measures to prevent the inclusion of personal data e.g. by only reading software usage with an automated software tool without recording corresponding names. Another option is to take joint measures to protect personal data. I think a reason to completely cancel the audit is rather unlikely unless a customer actually confronts the software licenser and poses the question if the audit clause is effective. From my experience, this is rather uncommon or simply not the case which may also be the reason that the effectiveness of these clauses has not yet been clearly determined in court.

The software company can assign a partner to conduct an audit. Among others, Oracle does this. What must be considered in such a case?

In such a case, it is important to note that there usually is no contractual relationship between such a partner and the licensee. You should make sure that the partner is obliged to confidentiality by a separate non-disclosure agreement.

Furthermore, you should assure yourself that the partner is a trustworthy company that handles the appropriate information securely. If this is not the case, you should approach Oracle to make sure that they choose another partner.

A question for many companies is how to handle software that is installed but not in use. To what extent do I have to license this software?

You must check and interpret the regulations of the appropriate license agreement because this is a mere contractual question. License agreements are indeed rather unclear in this matter so that there are often arguments on how to interpret these terms. A specific and recurring matter is the usage of Oracle with VMware. Oracle takes the view that even virtual machines not running Oracle software in practice, but having the option to run it, must be licensed. In my opinion, the license text Oracle currently uses for this matter does not reflect that so that customers can frequently develop a legally founded defense strategy against such questions of subsequent licensing. However, this very much depends on individual cases. This may be assessed entirely different for other software providers and other license agreements.

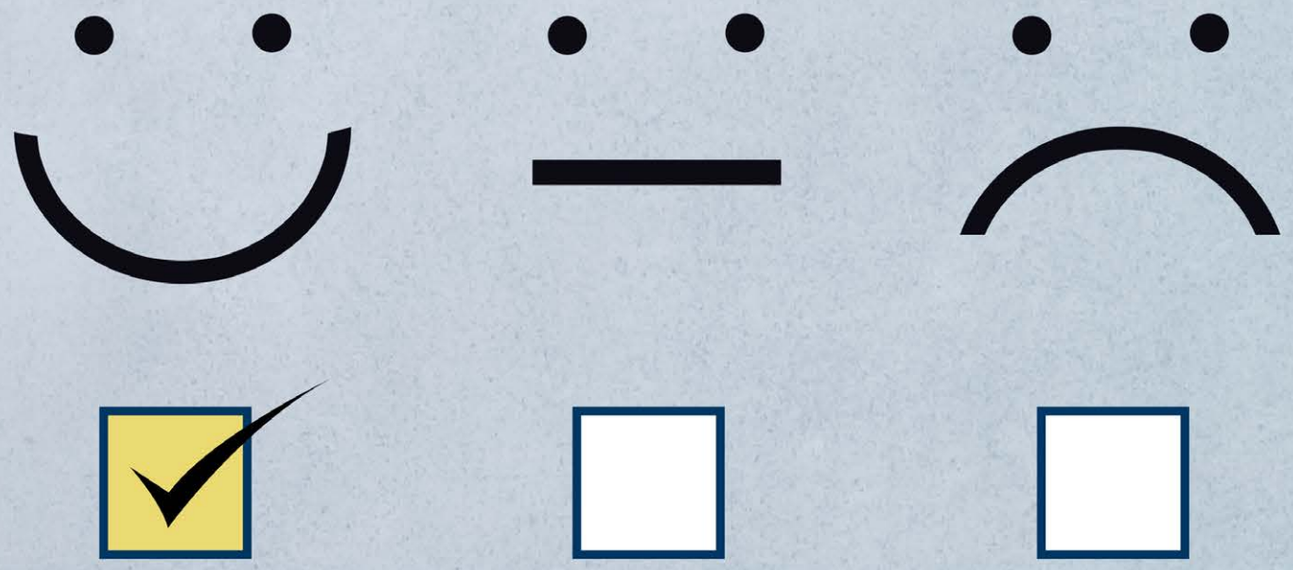
There are always people who criticize the software providers for conducting audits primarily as a business model to generate an additional income. What do think about this accusation?

This may be true for some software providers, and in various audit adversary proceedings, we have also witnessed that commercial aspects were in focus when they tried to improve their numbers at the end of a quarter. However, many software contracts are also so complex that scarcely anybody understands them – this may also be part of a business model in some cases. At the end, the licensee i.e. the customers should have a look at the license terms and the corresponding audit clauses when they choose their software products. They should then consider if these terms are fair before they sign a contract. There is no obligation to choose a certain product. You may rely on a competing product with better and more transparent license terms.

Dr. Thalhofer, thank you very much for the interview.

Alexej Schneider

User Experience — An Introduction



Today's world is no longer imaginable without modern technologies. Every single day, we use computers, tablets, and smartphones for various tasks. Be it checking the weather, networking, or quickly buying a new pair of shoes. Applications in the consumer market frequently have a good usability, but business applications rather less. Admittedly, these business applications are usually more complex but the user can often be supported in his work with appropriate tools.

Large companies such as Apple, Google, Facebook, or Amazon have shown us how to do that for many years. Their products can frequently be used intuitively, are beautiful to look at, and usually even fun. For companies, the main motivation obviously is selling their products. The market is highly competitive and when the products lead to bad experience, this can result in a loss of trust and a bad reputation. Positive experience, however, provides for loyal customers and good ratings. Consequently, much is done in terms of investments, development, research, and testing to satisfy the users. This is referred to as "User Experience".

Let's talk about UX

User Experience (UX) refers to the personal emotion of a user of an application, a system, or a service. The supreme discipline of a good experience is that you can get the user enthusiastic about the product. This must not necessarily refer to the digital world in the first place. We all know good and bad UX from our everyday life. Haven't you been annoyed before when you were in front of a door and did not know right away how to open it? Should it be pushed, pulled, turned, or does it perhaps open automatically? When it does not work immediately, you are annoyed and look for an instruction, ask for help, or maybe just let it alone completely.

This example is obviously exaggerated but we would assume that such an old interaction object should not pose any challenge to anyone nowadays. Our business software is a similar case. The software should primarily perform a certain task effectively, efficiently, and satisfactorily. A bad UX brings many negative aspects along:

- *productivity*
  When an application can be used poorly, the work takes longer; it may also be that more employees must be used for a task. This leads to higher overall costs.

- *training costs/familiarization period*
  Employees must be trained when the application cannot be used intuitively. In case of poor software, it takes longer until employees are productive.

- *support costs*
  When usability is poor, the support must help frequently.

- *development costs*
  When end users are involved at a late development stage (the worst case would be even after implementation), new unexpected requirements may come up. This may require a complete redesign.

- *satisfaction*
  Another important factor is the moral of the users. It is frustrating if you cannot carry out your work properly. Further productivity may also suffer due to this factor.

Naturally, business applications are usually more complex. But exactly this is what makes it essentially important to ensure a good UX. When you start dealing with UX, it can be quite confusing at the start. There are many new technical terms, many things are also rather subjective, and not everything is clearly defined. UX also consists of numerous components that act in combination with each other.

Frequently, UX is incorrectly associated with a nice user interface (UI). When an application only has a nice design, this does not also mean that it leads to a good experience. Obviously, a good design serves the positive association with the product but it is only one part of UX.

Another important component (if not the most important one) is usability. The user of the product should achieve his objective effectively, efficiently, and as satisfactorily as possible. “Usability” is a subjective term. What can be simple for one user, can be an impossible challenge for another. That is why it is important to exactly know your users during development and to adjust the application to their experiences and wishes. This is often referred to as “User-Centered Design” (UCD).

Jakob Nielsen phrased “10 Usability Heuristics for User Interface Design”[1] during the 1990s. Even if they have been formulated more than twenty years ago, these principles have not become less important *(refer to Figure 1)*:

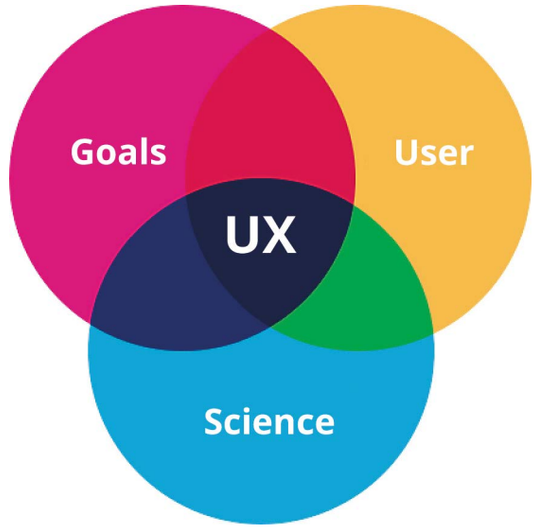


Figure 1: User Experience Component Interaction

[1] https://usersnap.com/de/blog/usability-nielsen

- *feedback*
  The system should always inform the user on what is currently happening.

- *common language*
  The system should speak the language of the user.

- *control and freedom*
  Users should be able to undo or restart actions.

- *consistency*
  Users expect certain design standards (such as logout always in the top right).

- *error messages*
  Error messages should be understandable by the user.

- *error prevention*
  Useful error messages are good, prevention is better (for example by client-sided validation).

- *flexibility and efficiency*
  Additional functions should make the work easier for the user.

- *recognition instead of remembering*
  All necessary information should be visible.

- *minimalism*
  Design should be limited to the bare necessities.

- *help*
  A good design is self-explanatory but the user still needs help frequently.

UX-Design

Until this point, this article dealt with the meaning of User Experience. But how can we implement this now for our applications? A good UX is not created overnight. Fortunately, this is not a new topic and there are many sources available (books, blogs, magazines, or tools). The process of creating a good experience is called “User Experience Design” (UXD).
The end users are in the center of each decision. That is why it is crucial to deal with the end users as soon as possible – that is to say, during the complete product life cycle and not only during development. In UX jargon, end users are often referred to as “persona”. These are fictional persons who correspond to a typical representative of a target audience. Relevant characteristics of personae are summarized and given a face. A persona usually has a fictional first name and surname and a photo. Furthermore, there are additional aspects that are relevant for the applicable product:

- age/sex/origin
- job/education
- computer skills
- goals/wishes/expectations regarding the product

Complex interaction concepts are difficult to describe. It is a long way from an idea to a ready-to-use solution. Developers, customers, and end users usually have different expectations regarding a product. That is why prototyping plays an important role in UX-design. The agile approach during prototyping supports the communication and aids the common vision of the end product. Prototypes can take on various forms in this process. However, each has its pros and cons and purpose *(refer to Table 1)*.

	Similarity to end product	Costs	Purpose	Features
sketch	---	+++++	brainstorming	quick, easy
wireframe	+	++	feedback	the skeleton of the application (without design)
mockup	++	--	feedback	the skeleton of the application (with design)
click-dummy	++++	-----	user testing	interactive, but no functionality

Table 1: Prototypes

Testing is the most important part in UX. There are also numerous variants of "how" and "what" to be tested. Gained insights can then be used to implement a better UX:

- *Expert Review*
  An UX expert examines the application based on usability criteria and personal experience.
- *Usability Test*
  Persons of the applicable target audience are observed while using the application.
- *Crowd Testing*
  There are providers who offer testing of an application by many users.
- *Eye Tracking*
  The view pattern of a person is made visible. This led, for example, to the recommendation of right-aligned labels.[2]
- *A/B Test*
  Different users get different variants of a product. Metrics are then used to find out which solution is more suitable.

UI-Design

The user interface is the central interface between human and computer. It is a good interface when the user is supported in his task and there are no obstacles in his way. Modern interfaces no longer consist of command lines but of a variety of elements (windows, forms, buttons, reports, charts etc.). It is usually the task of a designer to combine these numerous elements to an interface. It is, however, not necessary to have studied this in order to create an appealing UI. It is often sufficient to draw inspiration from other applications or to use frameworks such as Bootstrap.

However, design is more about rules and principles than you might think. Many design trends also emerged because of UX studies. For instance, humans do not read applications from left to right like a book. Web applications are a classic example. They are usually built in accordance with the "F Pattern Layout". According to this layout, the most important elements are placed in the top left (logo, navigation, calls to action), then the next line and so forth.

[2] https://www.uxmatters.com/mt/archives/2014/09/eye-tracking-in-user-experience-design.php

The human eye is looking for patterns by default. An appropriate design can guide the user through the application. For this purpose, we have various design tools such as positioning, size, color, contrast, distances, or the choice of fonts. The more dominant an element is, the more likely the eye moves to it.

UI-Design Patterns

There is no need to reinvent the wheel when you design new interaction elements. There are established best practices that can be used for your applications. These are often referred to as "UI-design patterns". In programming, there is a similar concept, the so-called "design patterns". These are solution templates for recurring design problems. In case of UI-design patterns, these are concepts the user knows from his everyday life. By using these patterns, the user does not have to think about the usage anymore and can ideally use the application intuitively *(refer to Figure 2)*.

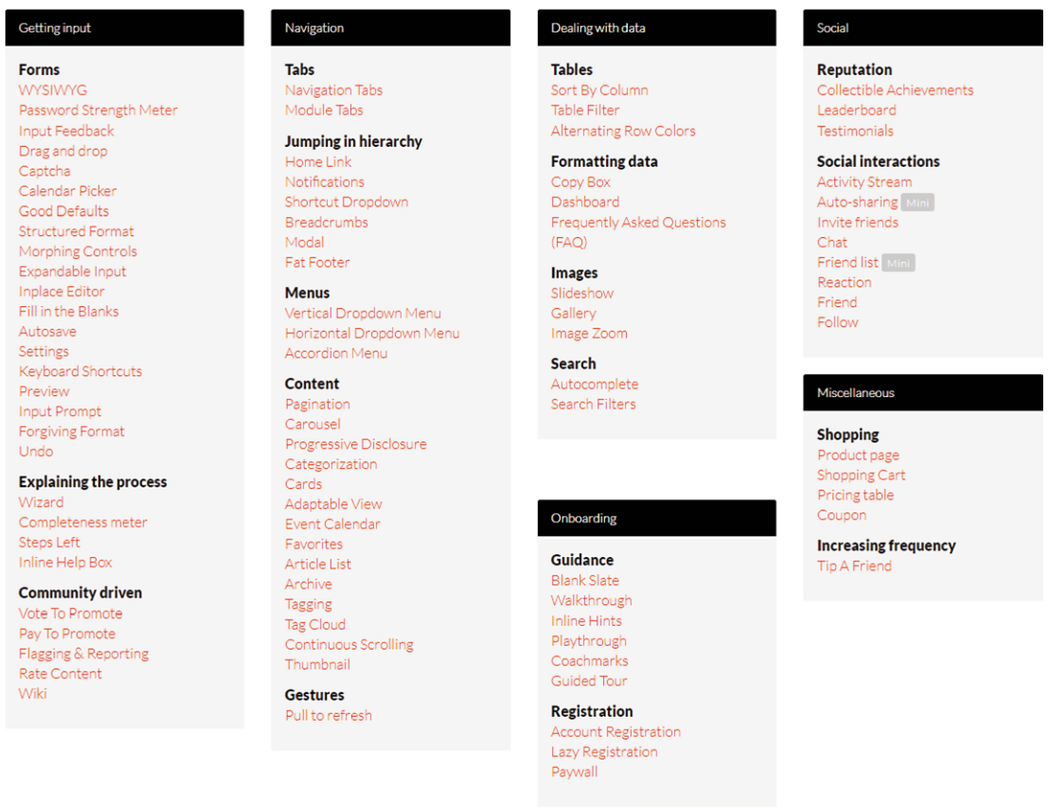


Figure 2: A Selection of UI-Design Patterns[3]

UX using Apex as an Example

Oracle Application Express (Apex) is a web-based software development and runtime environment. It is a default component of each Oracle database edition so there are no additional licensing costs. Apex is a rapid application development tool (RAD) that supports the quick setup of data-centered web applications. The developer has access to numerous components *(refer to Figure 3)* and can use a modular concept to build an application.

Many functions and features can be adjusted declaratively. The layout can be changed per drag & drop as desired. The close connection to the Oracle database makes for a fast implementation of prototypes that have far more functionality compared to simple mockups or click dummies. Thus, results can be presented quickly and tested for usability at an early stage.

Particularly since Apex version 5.0, many features have been added in the field of "UX". The design has been completely revised and is now named "Universal Theme". It looks modern now and is responsive. The "Theme Roller" and the "Template Options" can be used to easily adjust many design elements without programming skills. There are also numerous plug-ins on the Internet that steadily extend Apex.

If that is not sufficient, you have to work with CSS and JavaScript in case of special requirements. Fundamental knowledge about HTML-DOM and web development in general are mandatory. Nevertheless, Apex is extremely well-suited for creating user-friendly applications.

Conclusion

"UX" is a topic of major importance. A good UX strategy is essential for survival in the consumer market. UX slowly gains in importance in the business world. Users by now

[3] http://ui-patterns.com/patterns

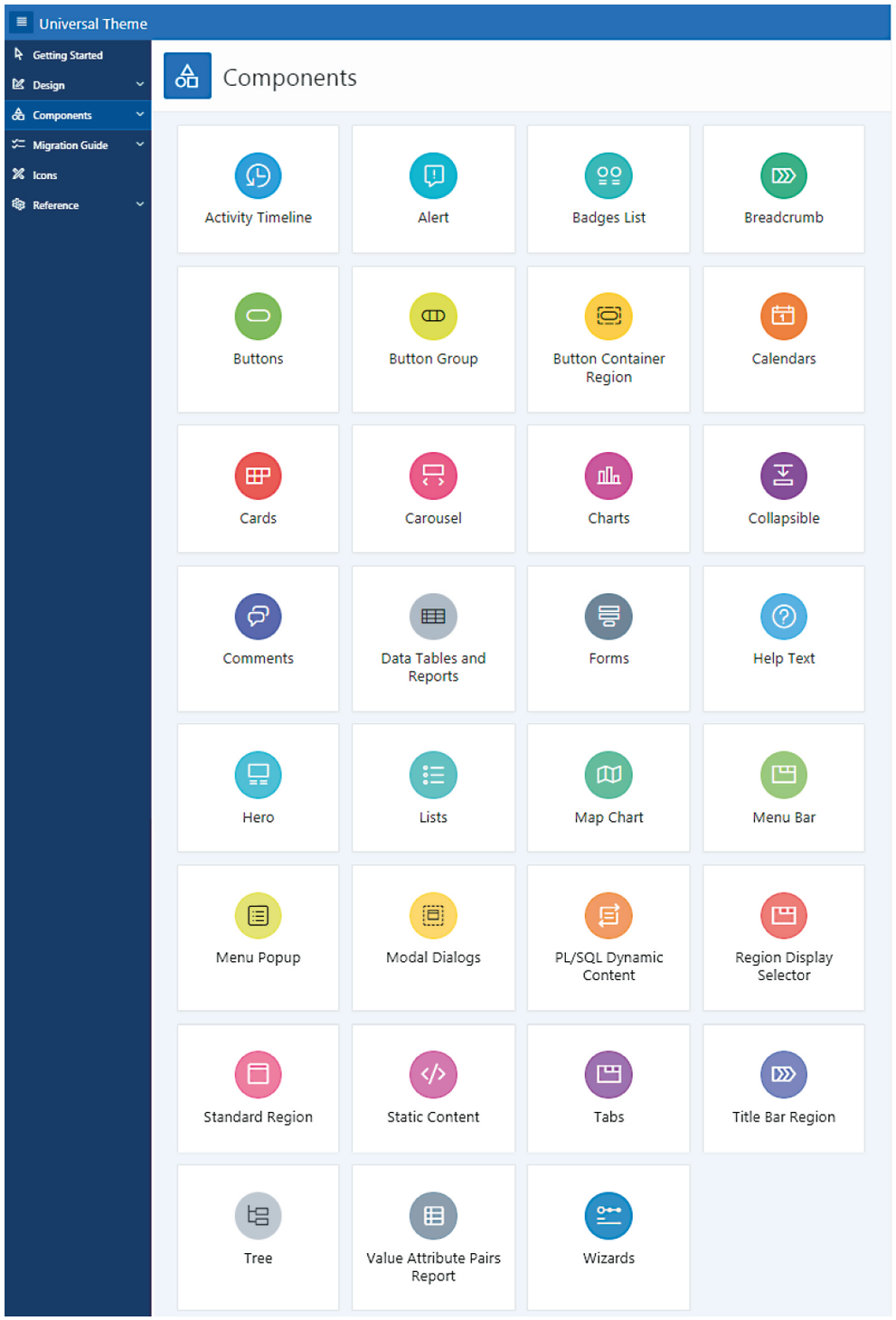


Figure 3: Apex Components[4]

Alexej Schneider
OPITZ CONSULTING Deutschland GmbH,
APEX Consultant

are accustomed to a high standard due to their private applications. They expect this standard more and more from their applications in working life. Obviously, a good UX strategy requires more resources. Developers, architects, and project managers must be trained in this field. They also frequently need knowledge about new technologies and tools. The user feedback during the development stage may also take longer.

In the long run, however, dealing with this topic has mainly advantages. As mentioned earlier, a good User Experience leads to more effectivity, efficiency, and satisfaction of employees. At the end of the day, that is exactly what everybody wants: writing good software that is eagerly used.

[4] https://apex.oracle.com/pls/apex/f?p=42

Wonderful People and Good Times in the US and Italy

Heli Helskyaho

Combining insightful conferences and meetings with the wonderful sights of foreign countries is one of the advantages you have as an active member of the Oracle community! Enjoy Heli Helskyaho's report on her first trips of 2019: She crossed the Atlantic to visit the US and returned to the old continent to spend some quality time in Milan and Rome, visiting the Tech Day in both cities.

Photo credit: Michael Rainey

My Visit to NYC and the Oracle Cloud Day

I have been part of the Oracle community for almost 30 years. I started being more active in the community in 2000, when I joined the local user group. Ever since, it's been an amazing journey to meet people who also love the Oracle technology, and to become friends with many of them. The wonderful "side effect" has been that I have not only become friends with them, but also their families – and they have not only become friends with me, but also with my family. So, whenever it is possible, I try to meet my friends while travelling.

My first trip of 2019 was to the Oracle Cloud Day in New York in January. I started my journey a bit earlier to have time to meet Rob Lockard and his family. Rob has been a friend for a long time, but being honest (no offence, Rob), I really wanted to see his mother, who has also become close to me during these years of being part of the Oracle community. I took a train with my elder son Patrik from NYC to Baltimore to meet Rob and his lovely wife Candy. We had amazing crabs with them and spent a wonderful and relaxing snowy weekend together.

On Saturday, we drove to Virginia to meet Roberta, Rob's amazing mother. It was a complete surprise for her, she knew I would be in NYC, but she had no idea about our plans to visit her. We enjoyed a wonderful Saturday, eating chili con carne and corn bread for lunch. Thank you, Rob, for your hospitality and for organizing this wonderful surprise! It was wonderful to see you all, especially Roberta. She is a true role model for us all.

On Tuesday I attended the Cloud Day. It was really fully booked. The agenda was interesting and Mark Hurd gave his keynote to a full room.

During the week I had lunch with an interesting professor from a local University. He is teaching Artificial Intelligence and Machine Learning among others. He has also written a

book about bikes! I just had to buy that book, and it is really interesting. I was supposed to meet Ronald Bradford and his family, but unfortunately, they were hit by a horrible stomach flu, and we were not able to find a time to meet.

I visited Google and Marc Fielding. Marc showed us around and we enjoyed a delicious lunch at one of the Google restaurants. It looks like Google is a great place to work! I would probably spend my days making coffee (amazing coffee machines!), training at the gym (free for employees), and having massages every day (free for employees). I would probably gain a lot of weight with their complimentary lunches…

Last but definitely not least we made a wonderful visit to MoMA with Brian Fitzgerald who has a super interesting job as a DBA for Nasdaq. Thank you so much for your hospitality, Brian! I also visited the Metropolitan Museum to find out that they have a piece in their exhibition made by my great-great-grandfather August Hollming!

I am so blessed to be part of this community, and I cannot wait for the next possibility to see my friends in this amazing community! Thank you everybody for being so awesome! It wasn't long until I had to pack my suitcase again, when I left for Italy.

The Italian Oracle User Group: a Platform for International Encounters!

The Italian Oracle User Group (ITOUG) is one of the younger Oracle user groups, founded in 2014. In 2016, the group was still only just gaining ground, as ORAWORLD had reported back in the day. This year I had the chance to go and visit the Tech Day in both Milan (January 30) and Rome (February 1). And the ITOUG has indeed exceeded expectation!

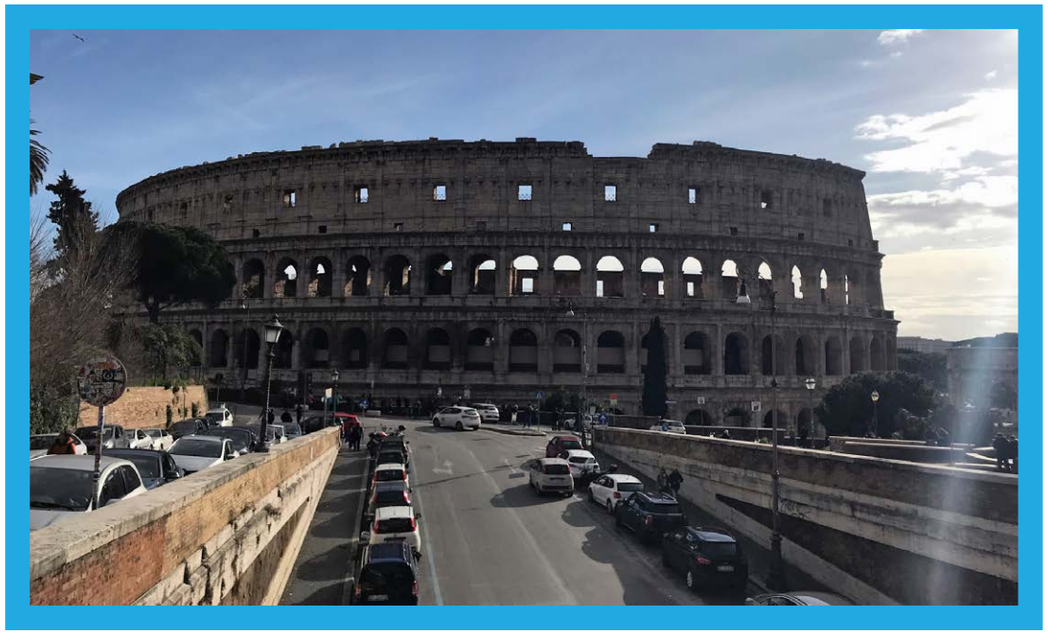
The ITOUG typically organizes one event a year, but after the great attendance numbers and amazing feedback I personally believe they will start organizing more meetups in different parts of Italy, for instance Venice. This is a picture of an ITOUG board member, Francesco Tisiot, telling the audience about ITOUG.

The piece my great-great-grandfather crafted

Both the events in Milan and Rome were held at the respective local Oracle office, offering two tracks: Big Data as well as Analytics and Database. And both the events were fully booked! It may be a surprise to hear that most of the content in their events are in English and also non-Italians are welcome to join.

The event in Milan started with a speakers' dinner in a lovely restaurant. It was really nice to meet the organizers and the other speakers. We did not see much of Milan this time because the local Oracle office is a bit far from the city center and the schedule was tight. The registration started at 8:45 am and the day ended at 5:15 pm. The day was full of interesting presentations and great discussions. When the day ended, we took a taxi to the railway station to take a train to Rome. We arrived in Rome a bit delayed and quite late, there was no energy to do anything else but to go to bed. The next day started with lunch and a very interesting tour in Rome.

I learned a lot about Oracle technology on this tour, but I also learned that you shall never order cappuccino after 11 am, you do not put ketchup in your pasta, and you do not mention pine-apple and pizza in the same sentence :-D And you cannot visit Italy without eating amazing food.



The day ended with a wonderful speakers' dinner

Thank you so much
ITOUG! Until next time...

Mathias Magnusson

The APEX Tour — Or the Power of a Good Mojito

Once upon a time there was a place by the name of "Sweden": Up north and so isolated from the world it was, that word of APEX' greatness had yet to reach the masses. All they knew was that winter was coming and they better get a new winter coat. Java reigned supreme, which may have been connected to this people's incredible fascination for coffee: A cup of Java stays by far the little nation's favorite drink to this day. It also happens to be one of the best ways to get some reprieve from the cold that holds this place in its firm grip for six months each year. And how far north is this place? Well, Sweden is one of the few countries where the question "When will the sunrise be?" may be answered by "oh I don't know. In about six weeks." Stockholm is much better off, the shortest day of the year gets all of six hours of daylight. And it is not daylight as you may think of – it is light of dawn all day, except the first and last hour when the sun is so slightly over the horizon that it is just a shade lighter than during the middle of the night.

It was in anticipation of that time of year that this story started a few years ago. The main protagonists were enrapt in a late night discussion at a secret party (that everyone knew about). But let me first remember the odd way through which I ended up at that pub.

Thousands of miles to the west of Sweden, a 'little' conference called "Oracle OpenWorld" in San Francisco took place. I was there, having just barely started the Swedish Oracle User Group (SWEOUG) as an officially recognized Oracle User Group (OUG). Somehow I ended up running into Ralf Kölling by the European OUG (EOUG) table. I had no real idea who Ralf was or even what the EOUG was or did. I left, thinking the EOUG Leaders Forum that would be held at DOAG was an event I ought to go to.

So that is why I happened to be at DOAG soon, and by another strange coincidence I knew Tobias Arnold. He had joined us at a meetup due to him vacationing in Stockholm because his wife is from the area. It was through him that I was invited to the secret (a.k.a. "well known party") and introduced to a large part of the APEX community which Tobias of course already was part of.

So there I was, late in the night, with a Mojito in my hand. Apparently Joel Kallman shares the same passion, because suddenly we were standing by a table with some of the APEX greats, discussing Mojito. Before long, Joel mentioned that they wanted to see APEX grow in Sweden. Somehow he got me to promise to get the team to Sweden to spread the gospel.

How did my plan for it look? All I had was a promise I'd made, coupled with a massive dose of inexperience – I had never pulled off any such event! But as usual, not knowing how to do it also means not knowing how hard it is, or how much it is that can go wrong. Perhaps this is also an advantage.

With a promise to have the support from the APEX team to come and speak on an APEX-only event, I returned to Sweden and told my trusted partners in crime Daniel Ekberg, Ulf Hellström and Andreas Sundin that I had made a promise I needed their help to hold. I may have phrased it along the lines of me having gotten Joel to promise to support us rather than admitting my late night weak moment promising Joel to set up an event. It is all about optics.

Said and done, we started planning the event, getting sponsors and trying to figure out how it's done. Again I leaned on Tobias, asking him about people who should attend the event. He offered to come himself and gave me a set of names. After a bit more time I realized I could use some help in getting in touch with some speakers, or figuring out others to ask. That is when it is good to know Heli Helskyaho, so I reached out asking yet one more person for a bit of help.

Heli did as usual not disappoint and my lucky streak continued. It turned out Heli had been thinking of setting up an APEX-day in Finland. So we decided to do it as a mini tour with the first day in Helsinki and the day after in Stockholm.

After a bit more work on planning we were as ready as we were gonna be. I flew to Helsinki to participate there, and then back to Stockholm to welcome all our registered attendees. We were flying high already before the event, as the number of registrations had exceeded our expectations.

My weakness of making promises when I am on an emotional high would of course rear its head again. The event was going really well, everything just worked and the attendees were showering me and my compadres with praise for the event. It was clear there were a lot of people wanting to hear more about APEX, and it was clear they loved the event just as much we loved holding it. I promised a few people that we would do it again next year. I think I may have gone as far as promising it during my closing remarks.

So there we were last year, knowing that we had set the bar extremely high for ourselves. People would of course expect an event that was just as good as the one in the previous year. I also may have mentioned it once or twice to people in the community how well it had worked. Yes, the truth is probably that I found a way to interject it into any discussion I had with people in the community. I know some speakers may have talked to others in the community. The result of it all: Norway and Denmark also wanted to join the party.

When more user groups want to join in, an event can definitely be called successful. So without thinking too much, we of course agreed to make it a Nordic tour. Thus the weakness for making promises on emotional high points had returned. I am happy it did, it turned out fantastic. But it also proved that going from two to four stops made it at least six times harder to coordinate. Combining two options is at most two combinations, combining four fields had about an infinite number of combinations.

Still the tour went off with great feedback in all locations. I cannot speak for the other locations, but in Sweden it is regarded as the premier event we hold each year and I know some speakers are really enjoying the event and the time they spent in Stockholm. Knowing our climate, we have of course set

the schedule for it to be at the end of the summer, when the days are long and the summer party seems to never end.

After a lot of discussions and trying to figure out what would work for all locations, we had the options sorted. The first year was hard because we did not really know all bits we had to solve, this time we knew. The problem now turned out to be the extra time it took due to the extra locations. It felt like we were late with everything. Kind of trying to run a marathon in a pace more fit for a short sprint.

But after getting everything in order we got the tour started and stop after stop reported great stories and great feedback from the attendees. The last stop was again Stockholm, we had a perfect day. The presentations were again top notch, and we got even more glowing reviews than the year before. After the event we went out to one of the rooftop bars that has become so hip in Stockholm.

Looking at Stockholm from a rooftop during a warm summer evening was a fantastic completion, and reward for all the hard and stressful work to get the event in place. That evening looking out over Stockholm with a Mojito in my hand, talking about APEX, the city, our industry and more with Daniel, Shakeeb, Carsten and others, was probably my favorite late evening last summer.

I was of course at an emotional high. You know by now what happens then. Even though we were worked out from the last weeks of getting ready, up on that rooftop I may have promised that SWEOUG would do it again this year.

The one thing we learned is to start the planning earlier. Thus we have just started the work on figuring out which locations will join and who our dream presenters will be in the summer of 2019. I'm sure everyone will do a fantastic job and we'll get to host one more fantastic APEX-day when the light is as magical as it only can be a late summer evening up where the sun never settles.

So with some luck, I'll soon find myself holding a Mojito on a warm night, looking out over Stockholm and promising to have us repeat it yet one more time, and make it even better.

Heli Helskyaho

Ambassador's Corner

Dear user group leaders,
I hope you and your user groups are doing well!

EOUC Leaders' meeting in Riga

Our next face-to-face meeting will be in Riga, Latvia May 29th. It will be combined with the famous Riga Dev Days 2019 conference. All EOUC user group members are invited to join Riga Dev Days 2019 for a discounted fee. If you are a member of any EOUC user group please contact your local user group to learn more about the discount!

The EOUC leaders meeting is organized by user groups, and we hope many of you user group leaders will be able to join. Any ideas and suggestions about the content can be send to Heli and/or Ami. I want to take the opportunity to thank LVOUG and the rest of the organizing team of Riga Dev Days for their support on organizing this meeting!

Oracle OpenWorld 2019

The preparation for OOW 2019 is on. We will have seven excellent EOUC presentations at OOW. More about the preparations in the next issue of ORAWORLD.

I hope to see many of you in Riga!

Best regards,
Heli

Your Ambassadors:

If you have anything we can help with, please do not hesitate to contact us!

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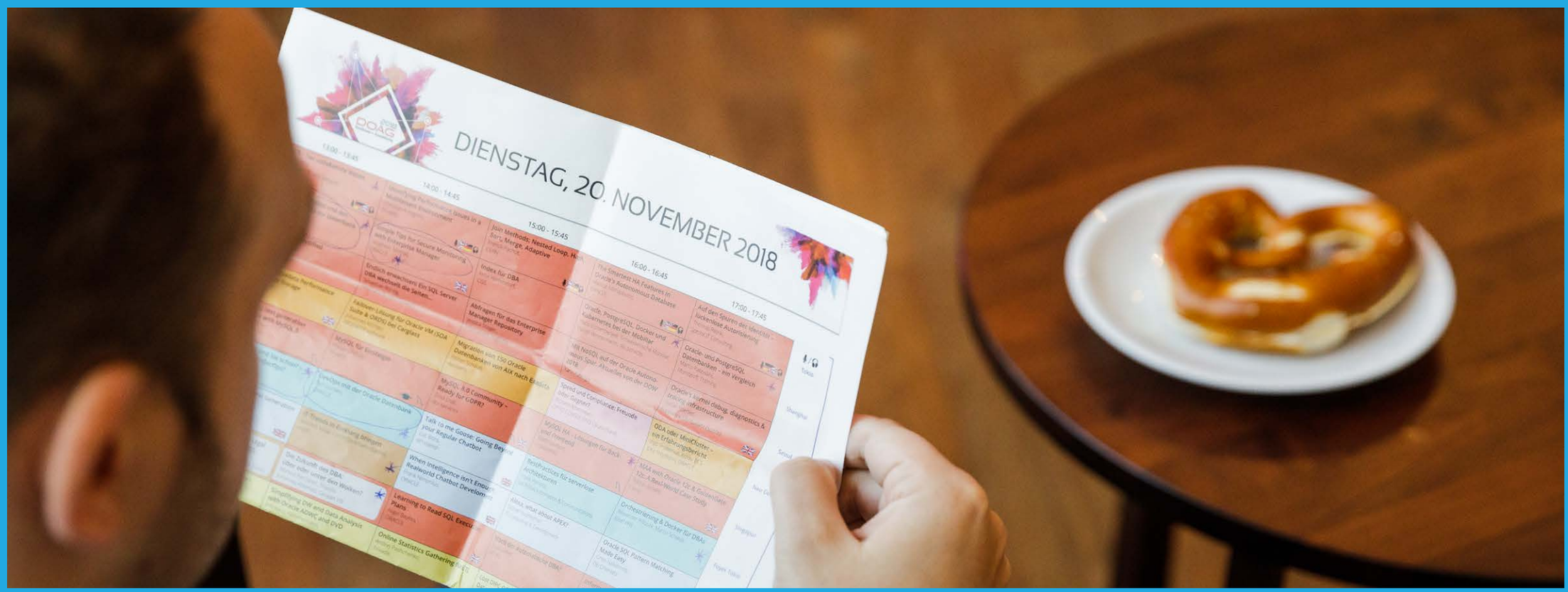
Call for Papers

HrOUG 2019

March 1 - May 31, 2019
Rovinj, Croatia
http://2019.hroug.hr

BGOUG Spring Conference 2019

April 30, 2019
Borovets, Bulgaria
http://website.bgoug.online/en/events/details/103.html



Events

APEX Alpe Adria

April 12, 2019
Zagreb
https://www.aaapeks.info/home

Expert Seminar with Richard Foote: Oracle Indexing Internals and Best Practices

May 8 2019
Berlin

AOUG User Conference 2019

May 15-16, 2019
Vienna, Austria
http://www.aoug.at

RigaDevDays

May 29-31, 2019
Riga, Latvia
https://rigadevdays.lv/

BGOUG Spring Conference 2019

June 7 - 9, 2019
Borovets, Bulgaria
http://website.bgoug.online/en/events/details/103.html

Kscope19

June 23-27, 2019
Seattle, Washington, USA
https://kscope19.odtug.com

Oracle Open World

Sep 16 - 19, 2019
San Francisco, California
https://www.oracle.com/openworld

APEX Connect 2019

May 7-9, 2019
Bonn, Germany
https://apex.doag.org/de/home

JavaCro'19

May 15-17, 2019
Umag, Croatia
http://2019.javacro.hr/

Full Stack Developer Conference

May 21-22, 2019
Helsinki, Finland
www.fsdc.fi

DOAG 2019 Datenbank

June 3-4, 2019
Düsseldorf, Germany
https://datenbank.doag.org/de/home

OUG Scotland

June 12, 2019
Glasgow
https://ukoug.org/page/ougscotland2019

POUG 2019

Sep 6-7, 2019
Wroclaw
https://poug.org/en/about/

HrOUG 2019

October 15-18, 2019
Rovinj, Croatia
http://2019.hroug.hr/

ORAWORLD is a publication of the EOUC — EMEA ORACLE USERGROUP COMMUNITY
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