

# User Experience Transformation in Telco Companies: Turkcell Case

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**Abstract.** Turkcell is a telecommunications company in Turkey that places the customer at the center of its organization. Customers physically interact with Turkcell through physical touch points; like Call Center, Turkcell shops, Turkcell web site (www.turkcell.com.tr), mobile devices or applications like Turkcell TV, Turkcell music etc.

Through a real commitment to the customer; Turkcell business units align themselves with the customer and emphasize long term relationships in order to satisfy customer needs. Value is created both for the customer and the company; by going well beyond selling products but providing comprehensive solutions. Competitive advantage is not based on Turkcell's products and services itself; but also in understanding the behaviours of the customer. Even the organizational structure was re-aligned, based on the needs of the customer.

This study will evaluate the transformation of Turkcell from product centrality to user centrality. It will also demonstrate how the company emphasizes an outside in approach in order to look from customers' perspective. All the business units were re-aligned cross-functionally to improve processes and to focus on customer-articulated needs.

For this purpose, user experience (UX) methods that are used within the company, studies conducted to increase awareness about UX, tools used to create solid UX outputs and a UX driven project where customer involvement was secured at all stages will be elaborated.

The findings will reveal that when a simple and consistent UX is delivered, it is possible to develop a UX strategy that will deliver a ROI, increase competitiveness, drive customer loyalty and innovation within a company. By keeping the market updated on the recent success stories and innovations within global companies, it is also possible to show the benefits of UX, make it tangible and easier to communicate.

## 1 Introduction

Turkey is a hub for its region; posting sequential growth in last 10 quarters. With 8.5% growth (as of December 2011; 2012 not announced yet), it's a booming economy with considerable size, and it follows China to be the second highest growing economy in the world. It has a sizeable potential for the sector; population is 75.6 million and half of the population is below 30 years of age.

Turkcell is the biggest mobile operator in Turkey with 52% market share. It's operating since 1994 and has presence in 9 countries (Turkey, Germany, Moldova, Ukraine, Belarus, Georgia, Azerbaijan, Kazakhstan, Cyprus) with 69.2 million subscribers and \$5.83 billion revenue, as of December 2012. Its market cap is \$14.47 billion; and it is also the first and only Turkish company listed on NYSE since 2000.

Turkcell's vision is "Adding value to the lives of customers; by focusing on technology and focusing on people". Turkcell is aiming to adopt a user centered approach for developing products and services. As an early mover in this area in Turkey, Turkcell has a great opportunity to clearly differentiate from the competition with offerings that create maximum value for the users.

Turkcell has been involved in initiating the UX transformation since early 2011. During spring 2011, the so-called "Funnel" which is laying out an ideal product and service development approach as a guideline for Turkcell has been prepared. The outcome of this first project was four documents building up a reference framework:

1. Turkcell Product & Service Development Process: Funnel 3.0
2. Turkcell UX Standards
3. Turkcell UX Methods
4. Turkcell UX Guidelines

The aim is making the process more tangible and directly applicable for Turkcell people even with limited UX experience.

## 2 Customer Experience Management @ Turkcell

At Turkcell, Customer Experience Management (CEM) is the framework for the company's UX transformation and design thinking. The motto of CEM is "To design experiences that simplify the life of customers and make them feel cared for".

In order to ensure the commitment of the customer, a company-wide project was initiated during spring 2011, **Customer 2.0**, where all departments got involved cross functionally. Different stakeholders started to work together and contribute to product & service development process, **Funnel 3.0**, as well as the customer itself.

This new approach wasn't blindly following what customers tell the company to do. Sometimes customers themselves may not be able to articulate their needs precisely. Instead, the approach involved a creative process driven by a deep and holistic understanding of the problems of the organization's technological and service capabilities. The goal was not merely to serve customers, but to immerse yourself in customer problems so you can offer up unique solutions [1].

3 values for the company were defined with Customer 2.0;

Trust: Do what you say, say what you do. Provide sustainability for your promises.

Simplicity: Ease the customer's life by empowering simplicity.

Care: Care for the customer's emotions, show hospitality.

### 3 User Experience and Design Thinking

For Turkcell, service design is design thinking applied to service development for people and with people, enabling collaboration and co-creation. It makes products & services useful, usable and desirable for the users, and efficient, effective and different for Turkcell. The user is at the center, the journey is tracked and all touch points are designed, aiming for the perfect user experience [2]. Service design is also about stepping into the user's shoes and designing the journey and the whole experience through the eyes of the user, making it properly work for them.

As a pioneering company, Turkcell established its Product and User Experience Department under Customer Experience Management in July 2011, 7 people then, to establish design thinking within the company, design the user experience of customers and make UX a company culture, using tools and methods applicable to Turkcell.

Accordingly, in order to clearly differentiate from the competition with UX and service design thinking, Turkcell UX vision was set as follows: To enhance and simplify the user experience at every Turkcell touch point & To make the customer live unique Turkcell experience.

#### 3.1 Turkcell Product and Service Development Process: Funnel 3.0

Turkcell Product & Service Development Funnel defines the way products and services are created at Turkcell. Instead of being a rigid process, it is a framework, with structure to provide clear guidance, but also the flexibility to accommodate the specific needs of every project. It is structured around phases and workflows and builds on a number of guiding principles.

The funnel consists of five key phases (*Ideation – Concepting – Design - Development – Live*). It progresses from an abstract idea to a working product or service; and rests on iterating the product/service concept with same activity workflow in each phase (*Learn – Design – Build – Evaluate*) throughout the entire process, going from comprehensive to detailed, fine-tuning the concept all the way. The four core workflows are complemented with a fifth one; *Manage*, that runs in parallel with all of them, specifying the activities needed in order to plan and manage the project according to the funnel.

2 of the phases will be elaborated during “Case Study” section.

#### 3.2 Turkcell UX Standards

Turkcell aims for high quality user experience with all of its products and services. To achieve this, a set of UX standards were defined. These standards help in creating services with meaningful experiences, meeting consumer needs. Also, in order to measure the quality of user experience, a set of key experience indicators (KEI) were defined – one for each standard.

Turkcell UX standards are divided into 3 categories:

**Service experience standards** are about users’ overall experience with the service, indicating how *useful, relevant, desirable, credible, and easy to use* the service is.

**Usability standards** (*Learnability, Efficiency, Communication, Feedback*) are more detailed attributes focusing on user interaction. They cover how easy it is to learn to use the service, how efficient it is to use, and how well the system communicates with the user.

**Cross-platform standards** (*Seamlessness, Consistency, Scalability*) are more detailed attributes focusing on consistency between service touch points and device operating systems. They are about seamless experience across platforms (PC, mobile, tablet, TV), scalability and compatibility across platforms as well as consistency between platforms.

### 3.3 Turkcell UX Methods

While a product or service is passing through funnel’s 5 phases, the product/service concept is constantly iterated within the activity workflows of the specific phase. UX methods listed below are some of the design methods tailored for Turkcell to be used for each activity workflow at every single phase:

**Table 1.** Turkcell UX Methods

	<b>Ideation</b>	<b>Concepting</b>	<b>Design</b>	<b>Development</b>	<b>Live</b>
<b>Learn</b>	User interview Shadowing Diary Study Trend research	Benchmarking User interview Card sorting	Business, Marketing, Branding requirements	Marketing and technical Implemen- tation Requirements	Regular Dash- board Customer Feedback Error Statistics
<b>Design</b>	Ideation ws Persona Vision poster User scenario	User scenario Feature roadmap Moodboard	Content map User flows Wireframes	Graphics, Motion, UI, content produc- tion	Service Im- provement Ideas Release Plan
<b>Build</b>	Paper prototype Vision proto- type	Paper prototype Throw away prototype	UI prototype Technical Analysis Doc.	Evolutionary proto- type Marketing Commu- nication Plan	Incremental Service Updates
<b>Evaluate</b>	Internal review	Internal review User evaluation User testing	Internal review User testing	User acceptance testing (UAT) Usability Testing System tests	Online analysis KEI Analysis KPI Monitoring

### 3.4 Turkcell UX Guidelines

Turkcell UX guidelines are living, constantly updated documents aimed at designers and developers producing digital user experiences either internally or with third party suppliers and agencies for Turkcell. The purpose of the guidelines is to make sure that all products and services are designed according to best practices in interaction design, and are consistent within and across platforms. In other words, using UX guidelines helps in creating differentiating products that are easy to use, appealing to

Turkcell customers and that meet Turkcell UX standards. To achieve this, guidelines give instructions on how to select the best touch points for a product or service and how to design for consistency.

The first guidelines at Turkcell were prepared in 2011 for key user touch points and Turkcell platforms (Channel specific UX guidelines for mobile, tablet, PC and TV). UX guidelines are still being prepared and constantly updated for applications, tariffs & campaigns, digital services and Turkcell branded devices.

## 4 Challenges

Turkcell is a large organization with a lot of history and many products; so what is critical is to build up a strategy that delivers a learnable user experience, builds confidence and makes to work easier and more effective. So the biggest challenges are; raising awareness within the company, making every single Turkcell person use Funnel 3.0 and its tools, monitoring the UX performance of products and services and improving processes as well as securing compliance to UX standards.

For this purpose, tools used to **raise awareness** are; UX magazine issued monthly, UX portal, periodical internal trainings tailored for the needs of different departments and UX Networking Day organized on a yearly basis; where CMOs, VPs, Directors and Heads of User Experience, Customer Insight, Marketing and Customer Services from various sectors, Ph.Ds and professors from universities and senior executives from UX Consultancy firms are invited to explore and exchange ideas about UX.

While **monitoring UX performance**, UX Team, who is driving Funnel 3.0, get involved in the projects and inject the user viewpoint in them. This is performed in various ways. There is an internal team of 450 people who voluntarily experience the products and services before launch. It is a proactive action and gives time to fix the problems earlier. There are KEI sets tailored for every single product & service that help evaluate if a product or service is ready for launch or not. Scorecards of products & services are issued periodically; where KPI's and KEI's are tracked together; to show how experience drivers affect the business objectives of products & services. There is a usability lab, "7th Sense"; where user tests, field studies and user interviews are conducted; using methods such as eye tracking, think aloud, card sorting and user testing.

The biggest step taken to **improve processes** is Funnel 3.0. UX is not a step in the process anymore; it's the heart of product development. UX team starts to work with the product owners at the ideation phase until live operation. Also without UX approval, the process cannot proceed to development or launch phases.

In order to **set up UX standards**, guidelines have been and are still being prepared for applications, touch points, tariffs & campaigns, digital services and Turkcell branded devices.

## 5 Case Study: Turkcell TV

### 5.1 Content

Turkcell TV is a social, personalized TV and video watching experience launched as an application in April 2012 for several platforms as tablet computer, mobile phone and web. It changes and refines the traditional approach to watching TV, where viewing is separated from related activities. The approach of Turkcell TV is “**viewing a show is only part of the experience**”. Before Turkcell TV, there was a similar Turkcell service called Mobile TV, launched in 2009, where you could watch TV channels live and only via mobile phone. With the transition from Mobile TV to Turkcell TV, the aim was to extend the audience, number of channels (web and tablet) and enhance the experience by improving the service according to users’ needs. So for this purpose, four end user design drivers have been defined:

1. **My shows:** Turkcell TV knows what I’m interested in and always provides me with the most relevant content and makes sure I never miss anything I like.
2. **With my friends:** A shared viewing experience with my circle of friends and those like-minded. Social discovery of new and interesting content meaningful to me.
3. **Enriching my viewing experience:** Provides me with the information relevant for the context that I care about and allows me to engage with the shows and the people around me.
4. **When I want and where I want:** My shows, my friends and my rich viewing experience is always with me, independent of time and place.

The goal of Turkcell TV was to develop a concept that answers these questions:

- How to bring TV viewing to the 21st century through easy discovery of personalized content anytime and anywhere?
- How to get people stay within Turkcell TV while watching and in-between watching TV?
- How to get people to come back to Turkcell TV also when not watching TV?
- How to build an eco-system around TV viewing that brings value to both viewers and businesses?

So service concept vision was defined as *Turkcell TV as a central entertainment hub and content platform*; where it becomes the central hub and aggregator for everything related to watching TV, before, during and after the show. It is the must-have service for viewers. It’s also the platform for brands to reach out to new and existing customers, activate them and engage with them.

End user value proposition was “*Never miss a beat*”; my content shared with my friends and extended with information and services relevant to me whenever and where ever I want. And business value proposition was an *opportunity engine* that provides businesses a new way to reach, target and engage with existing and new customers, creating a personal connection with the customer.

Turkcell’s defined enablers were: **Turkcell TV knows** who the user is, where the user is, what device/touchpoint the user is using, what the user likes and watches, who the friends and family members are, what they like and watch, what the larger community of Turkcell TV subscribers like and watch. **Turkcell has** billing system, infrastructure for reaching viewers, established communication channel with the viewers, a highly known and trusted brand.

### 5.2 Ideation and Concepting Phases

Within 6 months, an **ideation phase** was realized focusing on understanding the target group and defining the design drivers. Then, an intense **concepting phase** including UX benchmark analysis, defining & evaluating the service & UI concept and planning the UI design & release plan was conducted.

During **UI design**, UI solution was defined, creating detailed specifications and visual design and conducting a visual style evaluation based on a UI prototype.

Finally implementation requirements were set, graphics & motion & UI and contents were produced. After user acceptance (UAT), system and usability tests, Turkcell TV was launched in April 18, 2012.

**Ideation.** At the beginning of the ideation phase, overall insight about users in some selected market segments was defined. Also, personas were created and summarized in key target groups and a service vision for each group was defined to identify the core needs. Then, a day-in-life study was conducted for each persona; thinking about when, where, how and why the chosen persona/target group would use the service.

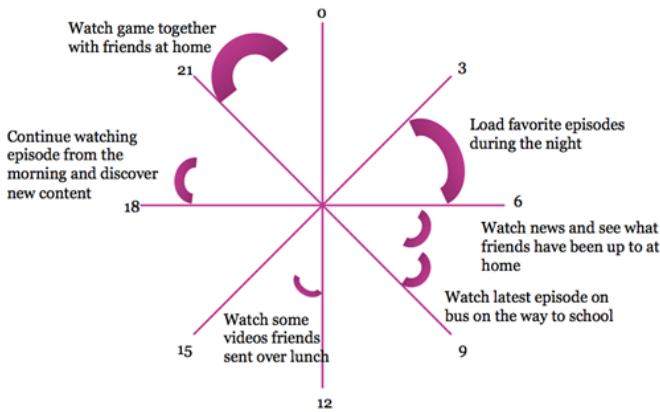


Fig. 1. Day in life

Afterwards, user journey was sketched to define key moments the user will have with the service and describe the personas journey.

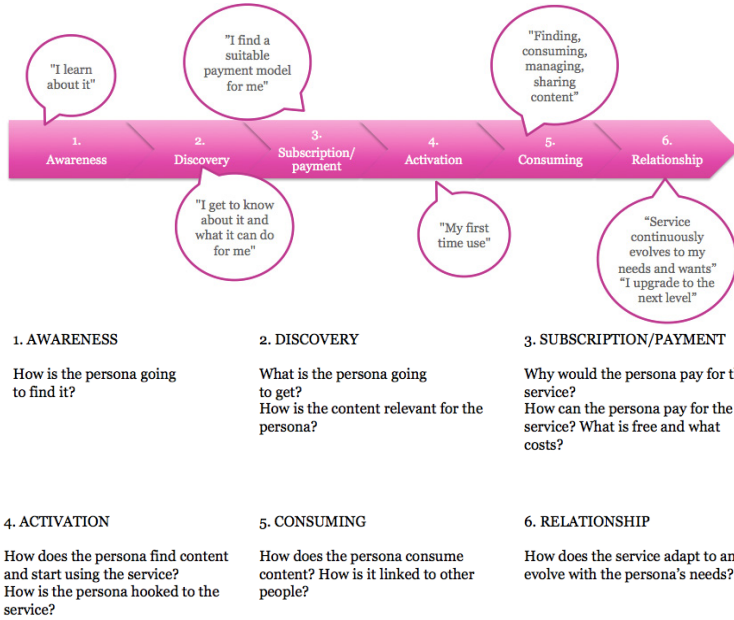


Fig. 2. User Journey

Finally, design drivers and features were defined for end users and business, in order to give a first overview on features related to the design drivers:

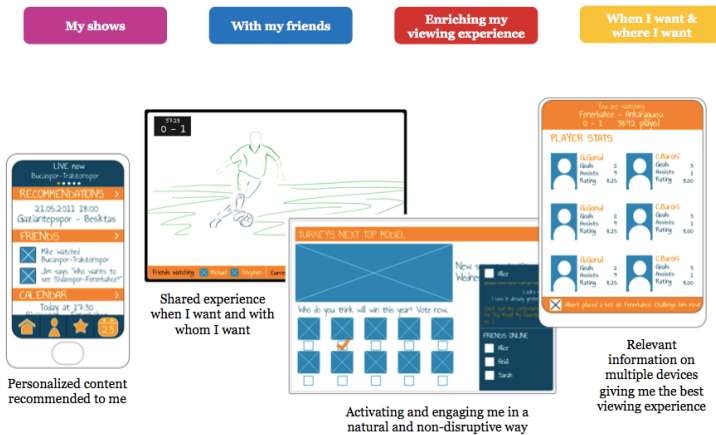


Fig. 3. Key End User Features

**Concepting.** In order to translate the early idea into a comprehensive solution, a comparative study of the UX of competing services or other reference services was conducted and the competitors scores were summarized to analyze gaps and opportunities.



	Multi-screen	Personal	Social	E-commerce	Value-added
Perfect	Clear opportunities exist across main offering areas.				
Very good	Verizon FiOS huluPLUS		Verizon FiOS		SMART TV huluPLUS
Satisfactory	tivibu cubovision	SMART TV tivibu huluPLUS	SMART TV tivibu huluPLUS	Verizon FiOS SMART TV tivibu huluPLUS	Verizon FiOS tivibu
Unsatisfactory	SMART TV 	Verizon FiOS cubovision	cubovision	cubovision	cubovision

Fig. 4. Benchmarks

Service eco-system was illustrated; connecting the key service areas and content sources:

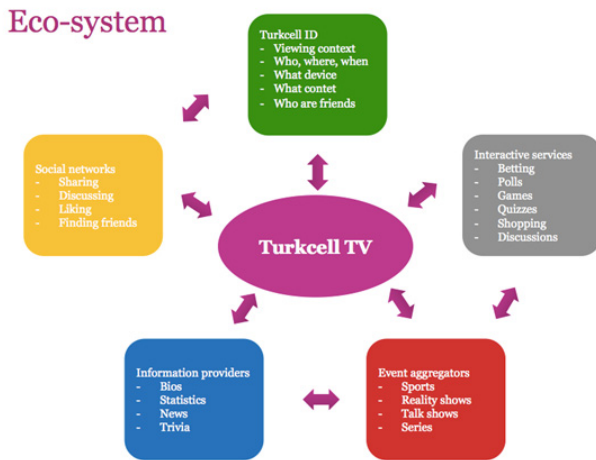


Fig. 5. Eco-system

And a detailed document was prepared specifying name and slogan of the service (elevator pitch), value proposition and competitive positioning as well as user, business and technology drivers & rationales of the service.

Extended Value Propositions were set as follows:

- Consistent, simple, seamless user experience at all platforms
- Social TV with facebook and twitter connection
- Multiscreen bookmark feature (Capability to move cross platforms)
- Broadcasting technology adaptive to internet speed
- www.turkcelltv.com (Along with mobile and tablet)
- Hundreds of movies with single price
- Movie rental without subscription
- Mobile internet free of charge while watching on mobile or tablet PC
- Richest film archive

Service concept vision was described and based on the defined target groups and key needs, the first key use cases were sketched. This helps to make the first ideas more tangible and to see the bigger picture. The proposed concept was also evaluated with end users: service vision, new approach, design drivers, scenarios.

Based on the studies, key takeaways showed up (a sample shown below) and release plan was developed;

- **Full-functionality not required:** No point providing full-functionality social media integration, with a solid input device strategy (remote compromises usability seriously).
  - **Contextually Social:** Instead, contextual social media integration, like commenting, searching, recommendations related to content and ongoing activities will be valuable, and augment the basic TV experience.
- BUT**
- **Social media is often private:** Do not include social media integration with compelling cases for their value in use in public/ with family. (Youngsters will be selective about social media use on TV).
  - **Different for TV vs. Mobile:** Since mobile usage is much more private, features on mobile should support privacy, while TV features should be more social / group oriented.

Fig. 6. Key Take-aways

## 6 Turkcell TV in Numbers and Conclusion

1 month after its launch, May 2012, Turkcell TV's subscriber number reached 140.000, surpassing Mobile TV's 3 years audience (90.000) by more than 50%. In January 2013, 9 months after the launch, subscriber number reached 240.000, increasing by 166%. The aim is to reach 500.000 subscribers till the end of 2013.

By creating a more desirable, useful, learnable and seamless user experience platform, engagement rates increased as follows: While active service usage was 44% for Mobile TV per month, it reached 52% for Turkcell TV, one month after the launch.

As the findings reveal; when a simple and consistent UX is delivered, it is possible to develop successful products & services that deliver a ROI, differentiate from the competition, and drive customer loyalty.

This study provided the following implications for the improvement of user experience within a company:

- Know your users. Step into your user's shoes.
- Show the benefits of UX. Make it tangible and easy to communicate.
- Team up with stakeholders.
- Set up standards.
- Monitor the performance. Iterate.

## References

1. Gulati, R. (Re)(Organize) For Resilience, p. 17. Harvard Business Press (2009)
2. Mager, B.: The Journal of Service Design: Touchpoint. Service Design Network (2012)