

Information graphic for public place

(Regional Transport Office - Thane)

Project III

Submitted in the partial fulfillment
of the requirements for the degree of the
Master of Design in Visual Communication

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Approval Sheet

The Visual Communication Project entitled "**Information graphic for Public Places**" by Prashant Mohan Bhandare is approved in partial fulfillment of requirement for the postgraduate degree in Visual Communication.

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Acknowledgement

The inspiration and initiation for this project has been my project guides **Prof. Anirudha Joshi** and **Prof. U.A. Athvankar** and I am Thankful to them for their invaluable guidance and inspiration throughout the project. Also I am thankful to **Prof. Ravi Poovaiah** and **Prof. G.V. Sreekumar** for their invaluable support.

I am thankful to **Transport Commissioner**, Government of Maharashtra. also thankful to Mr. P.V Mahajan (Dy. Transport Commissioner) and Mr. Khade (Dy. A.R.T.O. Kokan region), and Mr. Shivaji Patil (A.R.T.O. Thane) for their invaluable support.

Also Thank to user which I interviewed.

Thanks to all IDC faculties, staff and my classmates for their support.

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One step at a time

How do you get to the White House? It's a long journey, but you can get there if you know the steps. This chart shows you the 25 steps you need to take to become the President of the United States.

Created by: Mervin T. Johnson in December, 1992

1. You need to be a citizen of the United States

1. You need to be a citizen of the United States. You must be born in the United States or become a naturalized citizen. You must be at least 14 years old when you become a citizen.

2. Take a good education. You need to go to school and get a good education. You should get a college degree.

3. Be a good leader. You need to be a good leader. You should be a member of a leadership organization. You should be a member of a political party.

4. Work hard. You need to work hard. You should be a hard worker. You should be a person who is always ready to take on a challenge.

5. Keep good records. You need to keep good records. You should keep a record of all your accomplishments. You should keep a record of all your failures.

6. Be a good person. You need to be a good person. You should be a person who is always kind and helpful. You should be a person who is always honest and fair.

7. Know your country. You need to know your country. You should know the history and geography of the United States. You should know the values and traditions of the United States.

8. Be a good citizen. You need to be a good citizen. You should be a person who is always respectful and law-abiding. You should be a person who is always responsible and accountable.

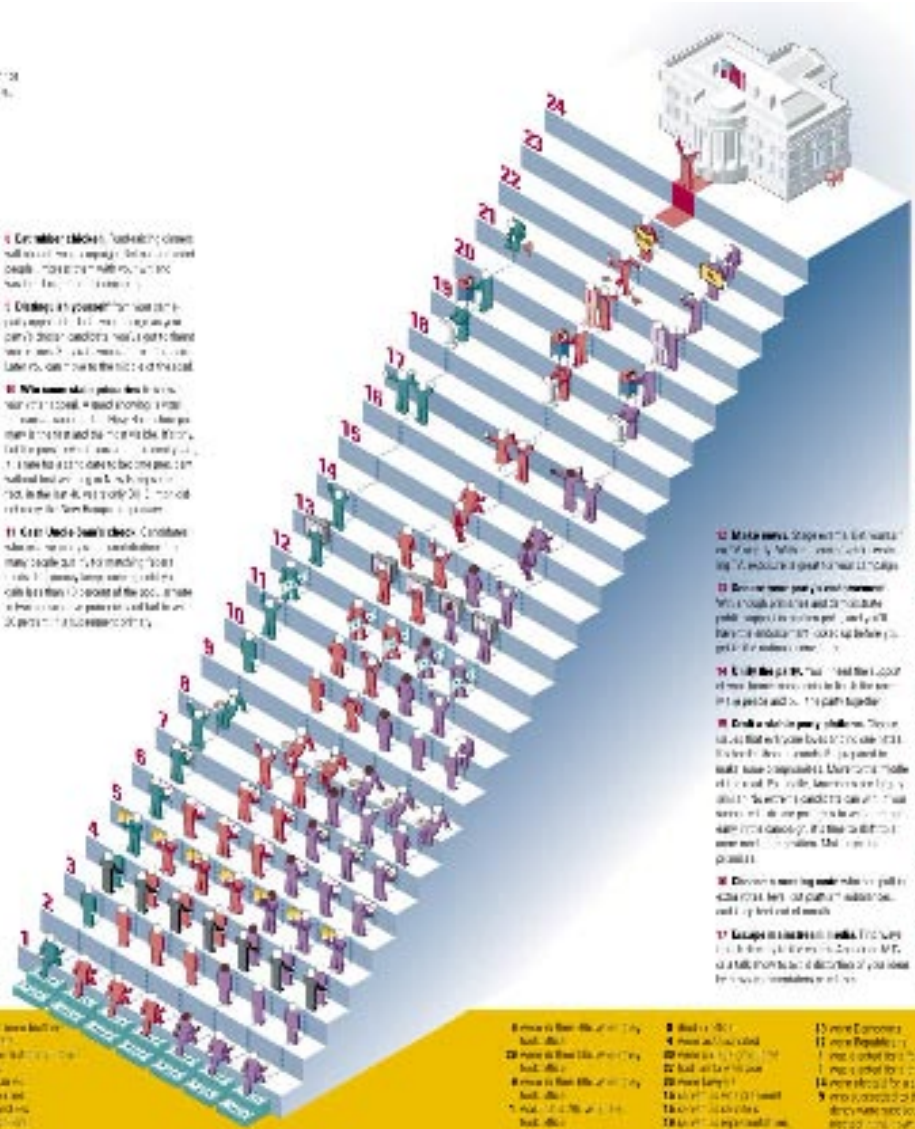
9. Be a good leader. You need to be a good leader. You should be a person who is always confident and decisive. You should be a person who is always inspiring and motivating.

10. Be a good person. You need to be a good person. You should be a person who is always kind and helpful. You should be a person who is always honest and fair.

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13. Be a good leader. You need to be a good leader. You should be a person who is always confident and decisive. You should be a person who is always inspiring and motivating.



Becoming President
How do you get to the White House?



- 14. Make sure you are a good leader. You should be a person who is always confident and decisive. You should be a person who is always inspiring and motivating.
- 15. Be a good person. You need to be a good person. You should be a person who is always kind and helpful. You should be a person who is always honest and fair.
- 16. Know your country. You need to know your country. You should know the history and geography of the United States. You should know the values and traditions of the United States.
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- 25. Be a good citizen.

Ref. No. 2

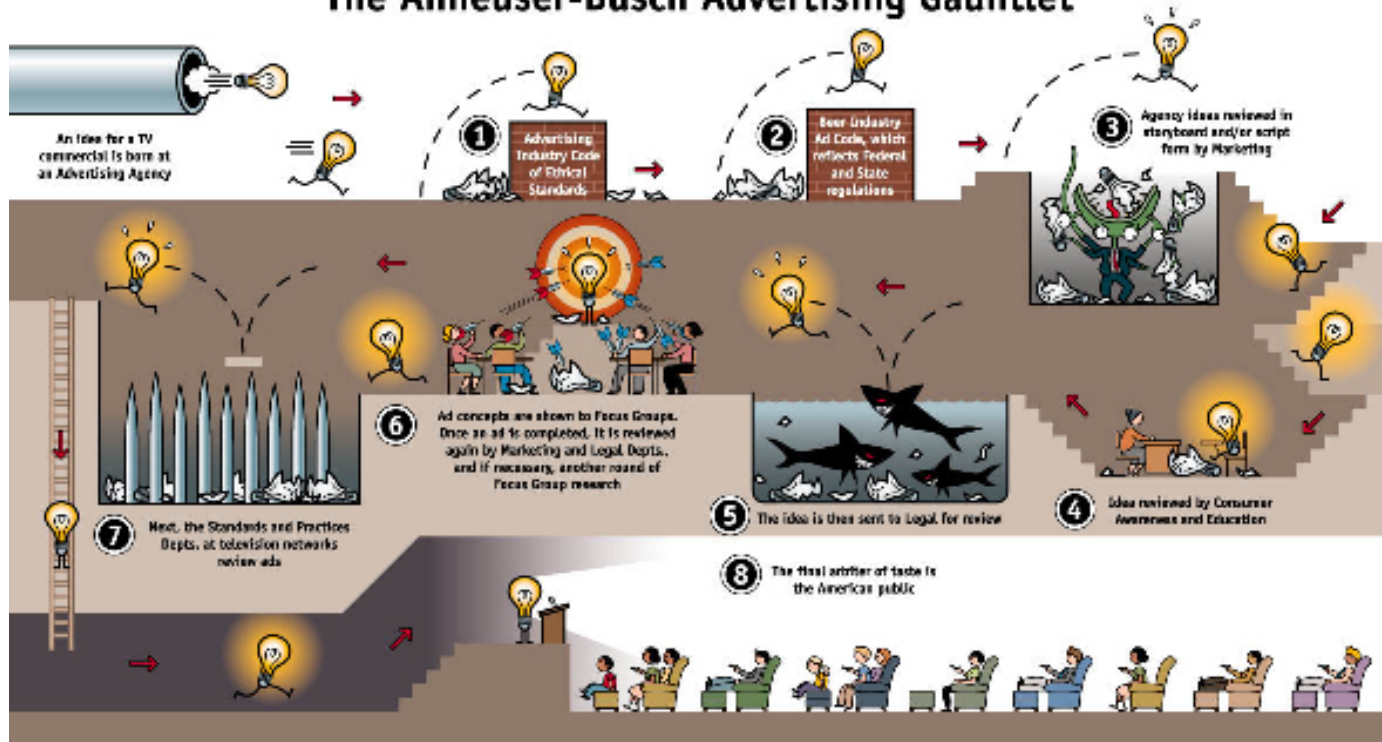
Becoming President

How do you get to the White House
Understanding USA “Becoming President” chart
Creation Year - 1999

Visualizing the USA: Making Public Information Public

Richard Saul Wurman, the father of information architecture, believes “Public information should be made public.” His work, Understanding USA, published in 2000, is an excellent resource for those looking for guidance in the presentation of complex information—information designed to answer a specific question. His visual representations (Moore’s Law, Internet Users, Employment, Becoming President, Climatic Changes) demonstrate the expertise and precision of his work and serve as examples for others to follow.

The Anheuser-Busch Advertising Gauntlet



Ref. No. 3

Image courtesy of XPLANE as seen in XPLANE.com, Xplanations by XPLANE.com

The Anheuser-Busch Advertising Gauntlet

The Anheuser-Busch “Xplanation” of the creation of an advertisement as seen in XPLANE.com

An example among the many available at Xplane’s web site is that of Anheuser-Busch that wanted a visual narrative explaining the process of creating one of their advertisements. The result is a very clarifying diagram.

Introduction

The need of the society in Government sector is to understand complex processes and eliminate the third party involvement to reduce the corruption and also reduce the time and stress involved in completing the task. This is taken as aim of this project to analyze the possibilities of exploration.

In India many Government sector has a various kind of complex processes which needs to be follow to complete the task for the people. In this project I decided to explore the possibility in R.T.O. (Regional Transport Office) where huge number of people's interaction happens everyday. Starts from the 18 year old student to 40 year old private vehicle owner needs to face many complex processes.

Processes are not easy to understand when they are on the paper. The Understanding processes very effectively and easily is taken for the exploration.

Find the problem, you will get the solution.

I had face many problem while getting the Driving license at RTO. in PUNE. The proper way to get license in more stressful and time taking process and more complicated. An improper way but easiest way is help from Agent (today's condition). I had seen may people are taking this improper way to get licenses because lack of information provided to the people. I found this problem and got into the detail, the study related information graphic and getting licenses are more depended on each other. While studying information graphic /infographic in IDC this subject inspire me a lot to simplify the complexity between people and processes.

Aim

Designing a government information system to reduce the iterations in the flow of task at R.T.O. (Regional Transport Office) Thane, and thereby reducing the time and stress involved in completing the task. The aim is to reduce the interference of third party namely brokers in completing the task as many of the process are not well known to the public.



Ref. No. 4

Train time table information at Chrchgate station, which display the information about train destination, train time, and type of the train speed (fast local or slow local) also information about which station this train will stop in case of the fast local.



Ref. No. 5

This schematic map of the Mumbai area suburban railway network is by Arun Ganesh and is published under the following licence: Licensed under the Creative Commons

Scope

In India there is not much of investment made to implement a standard information graphic in the public places and Government organization involving public. This need is felt in recent times as much of the communication is globally linked and huge percentage of the population started demanding for a better information system.

Taking the government systems and their working as the main focus the system presently involves corruption at various levels as the public demands the work to be done sooner and they ready to pay any cost for getting the job done. This being the thrust and general public being the user, developing an information system that clearly conveys the conceptual model will run the complete task in a more efficient way.

The more refined way of representation as in case of information given in the Railway station – wherein the basic requirement of booking, traveling is well communicated and one could relate the same system anywhere and everywhere in India. The issues related to train number; train time and destination are coded in a sequence such that the complex system is understood even at smaller levels to the public. The same in Banks the basic transactions are well conveyed through information system and understood by people from different standards of living.

Need of information Graphic

In day to day life we encounter with lots of process, procedure and work where we need to learn the specific method to get that particular work done. For example : lots of Government procedure paying bills, registering, issuing certificate, getting ration card, getting visa, passport, license etc., the information system followed is much varied in each of the case. The graphic plays a vital role as the message conveyed has to be the same for the people from different backgrounds and standards of life.

The basic idea of completing a task with visual clues derived from the information provided is a challenge as the display should clearly guide the entire process visually. The entire task should take less time to understand and communicate at any levels from the user's point of completion.

“Information graphics (or infographics) have taken the media and communications industries by storm. From simple instructions on how to assemble your table, to explaining how a conjoined set of twins were surgically separated, to understanding what went wrong in the Challenger Shuttle disaster - designers, educators, journalists, and communicators in general have embraced infographics to help audience understand their intent in a swifter and smarter way.”

Ref. No. 6

INFOGRAPHICS SEMINAR HANDOUT , VENKATESH RAJAMANICKAM, OCTOBER 2005, SINGAPORE

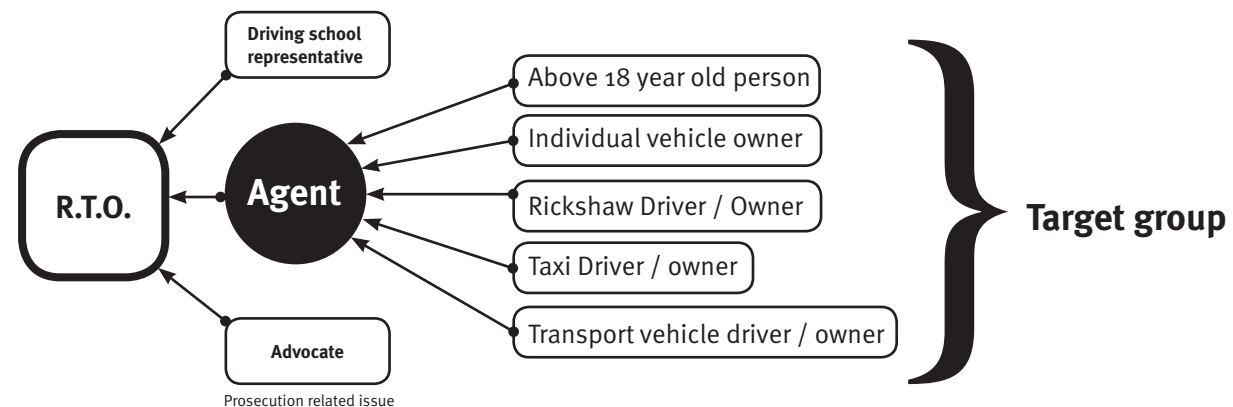
Target group

Who is target group?

The target group for this project comprises of the general public who come to complete or do a task in the R.T.O. This includes getting Driving license, Registration of vehicle, vehicle passing and other things which are part of the work involved in the RTO. The user includes **Students, vehicle owners to driver.**

Age : **18 to 45** years

In this project I am focusing on few of the proceedings to derive at design solutions for the same.



Focus

To develop a self explanatory and informative graphic visuals that helps to understand the processes easily to complete the task that the people want to complete at RTO office.

Chosen processes

The following is the list of task chosen to derive design solutions in regard to other work happenings in the RTO:

1. How to get “Learning License“?
2. How to get “Permanent License“
3. Vehicle registration
4. Issues related to prosecution

Project brief

The project is to study the processes and to explore the possibilities to derive design solutions to visually communicate the complete activity flow easily for everyone.

User study

First set of user study is done to identify which are the processes that causes delay and to understand the sub components involved thesame processes.

- to identify issues related to the processes
- Time taken for processes
- The process that is frequent and need to be solved
- To identify the necessary components involved in the process.
- To study how the user identify the process, location and related activities.
- To learn the existing system

Verbal protocol framed

- a) What is the work you need to complete at R.T.O. office?
- b) How many times you had come before to R.T.O. and for what?
- c) How much time it takes to complete your work generally?
- d) Do you give your work to the agent? If so why and what kind of work?
- c) How do you locate the place for your work in R.T.O building?
- d) What all the enquires you make in completing the task ?

Preliminary study

Specific location of R.T.O. (Regional Transport Offices)

- Thane (Licence and Vehicle registration section)
- Thane (old office - Prosecution and Tax section)
- Mumbai (East) - Wadala

List of work in R.T.O. (Regional Transport Office)

License

- Learning License
- Permanent License
- Renewal of License
- Test Drive for Permanent License

Registration

- New Vehicle Registration
- Vehicle passing
- Inspection of Vehicle

Permit

- National Permit
- National Temporary Permit

Rickshaw / Taxi / Bus / Passenger Vehicle

- Permanent Permit
- Renewal of Permit

Tax

- Tax Stamping
- Tax for (Light Weight Vehicle)
- Heavy and Transport vehicle Tax
- Tax for Passenger Transport

- Prosecution
- Fine

प्रादेशिक परिवहन कार्यालय, ठाणे

कामाचे विवरण	आवश्यक असणारे कागदपत्र	आकारण्यात येणारे शुल्क (फी)	कालमर्यादा
नविन वाहनाची नोंदणी	१) विहित नमुना क्र. २०, २१, २२	१) अपंगाचे वाहन - रु. २०/-	७ दिवस
	२) वाहनाचा इन्शुरन्स बिल	२) दुचाकी देशी वाहन - रु. ६०/-	
	३) विमा प्रमाणपत्र	३) दुचाकी विदेशी वाहन - रु. २००/-	
	४) वाहन मालकाचा निवासी पत्त्याचा पुरावा (इलेक्ट्रिक बिल, टेलिफोन बिल, विमा पॉलिसी, पासपोर्ट इ. पेकी एक)	४) चारचाकी देशी वाहन - रु. २००/-	
	५) वाहन विदेशी असल्यास (सीमा शुल्क भरल्याचा दाखला, कस्टम बिलअन्स सर्टीफिकेट, बिल ऑफ फन्दी)	५) चारचाकी विदेशी वाहन - रु. ८००/-	
	६) वैध तात्पुरती नोंदणी (प्रवेश कर भरल्याचा दाखला)	६) जड वाहन - रु. ६००/-	
	७) ऑक्ट्रोय (जकात भरल्याचा दाखला) (आवश्यक असल्यास)		
	८) आयकर संदर्भात नमुना क्र. ६०		
	९) प्रवेश कर भरल्याचा दाखला (पर प्रांतातून वाहन खरेदी केले असल्यास)		

Understanding existing information board

Here are some of the observation regarding existing information provided to user

- No Information is conveyed in terms of location and desk
- No indication to find inquiry window
- The work timing/ operation for each of the task is not conveyed as many of the task close at particular timing which the user doesn't know through the board
- There no information to identify the place of "Form issue" for each of these task

वाहनांचे हस्तांतरण

कामाचे विवरण व नमुना क्रमांक	आवश्यक असणारे कागदपत्र	आवश्यक शुल्क
१) वाहनाची विक्री झालेल्या प्रकरणात फॉर्म नं. २१ व ३०	१) तो हस्तांतर प्रमाणपत्र (वाहत इतर रोज्यातील किंवा विक्रीसाठी आल्यास)	१) अर्जाचे बिल रु. १०/-
	२) नोंदणी प्रमाणपत्र	२) दुचाकी वाहन रु. ३०/-
	३) मृतुतीत असलेले विमा प्रमाणपत्र	३) इतरके वाहन रु. १००/-
	४) पन्त्याचा पुरावा	४) वाहन वाहत रु. २००/-
	५) कर्ज असल्यास कर्ज देणाऱ्याचे ता हस्तांतर प्रमाणपत्र	५) अर्जाचे बिल रु. ३००/-
		६) अर्जात केलेले वाहत रु. १०००/-



Understanding existing information graphic

- The information board is not located in a prominent position at place of entry. Hence, the user is with no clue to locate the information board.
- There is no standard method of representation in the board also mapping the “Number“ with the specific window is never made clear to the user.
- The signages used are not clear in terms of location where and how to proceed on the task inside the RTO. Office area.



1

Case

I went to RTO to fill tax for my vehicle (which is a real novel work in India). Lot of agents tried to lured me and get my work done, but knowing I have all documents I proceeded myself and approached the Superintendent counter. I have showed all relevant documents (in fact I had all, whatever he asked for). He then very **simply and politely explained the lengthy, detailed and cumbersome process of filling tax**. I was asked first to go Commissioner Office in Sheshadripuram fill the entry tax, then again come to R.T.O. office fill tax, after 2 months get the registration number changed. Aghast I came out (all agents were laughing on me). At last I approached one, bribed him 300/- and he got my work just in 5 minutes and gave me road tax challan, in my name for my vehicle.

Vivek Kumar.

Ref. No. 7

2

Case

Why there is no improvement in services at RTO offices in TAMILNADU? I am in Tirupur: It is a city with more two wheelers and cars: Daily about 1000s vehicles come fresh registration and new license, tax payment and etc work is high. But the RTO officials or the Government is not taking any steps to make good service; Suppose if a worker, employee or a man spend a day he loses about Rs 200 per day: I find about 500 people (on average) are spending the day to complete the work: So daily Rs one lac worth man power is wasted by the RTO ,Tirupur only:

Why cannot the higher officials or the minister concerned take action to do best service to the public, You see an average 3 billion man power wasted per year in Tirupur only

Further there is no proper guidance for the public: So they have to approach the broker only. The PRO is in a corner but nobody will disturb him.

When these will change???

ARTHANARI R

Ref. No. 8

3

Case

Last couple of weeks I went home visiting, Nagpur India. There I deliberately tried to deal with a Govt. office and a Bank to see how things have changed, So here are my experiences at the RTO office.

First let me give you the background of the story, I am born and brought in Nagpur. I applied for my drivers license for the first time in 1989, it took me a day to get learner's license (motorcycle with gear). After couple of months I went back, I was asked to give a driving test, during which an officer sat behind me and took the test and by evening I had my license. This license was valid for 5 years which incidentally expired. So there I applied for a new license and got one in a day after going through all the procedure with an additional privilege of driving LMV (Light motor vehicle).

This time when I went home I thought, as I have nothing to do with Jamshedpur, I should get my drivers license transferred to Nagpur address

(which is my permanent address). My brother suggested me to give him the license and he'll get the work done without me visiting the RTO, but I had to see the change in for myself, so here the story goes.

Day 1 (5th September 2000)

I went to RTO to find out the procedure about this work, I went to the forms distribution window and asked, the guy behind the window told me very rudely, that I have to write an application on plain paper and submit. I went home typed an application, attached proof of my address to it.

Day 2 (6th September 2000)

I went with all of my paperwork to drivers license department, there I asked couple of people sitting behind the window about my work, they gave me an impression that I was talking about some big work to be done. Finally one nice person told me to go to "Bade Babu" Mr. xxxxxx. So went to Mr. xxxxxx he scanned my paperwork and told me to get an NOC (no objection certificate) from Bihar, when I told him about the

practicality of getting the NOC, he asked me to go to ARTO Mr. xxxxxx. So I went to Mr. xxxxxx, there I explained him the situation. He scanned my papers and asked me whether I have originals for the proof of my address, for which I offered him to show them, for which he said he need not see them. He wrote instructions on my application directing his subordinates to do the required work. I thought wow the work is done, so went to the clerk of the first window, he asked me again to go to Mr. xxxxxx (there is total chain of command), so I went to him, he was out with meeting with "Saheb". I waited there for around half an hour, he came back and wrote below ARTO's instruction instructing his subordinates to accept a fee Rs. 10. By this time it was 2:40 PM and the cashiers window closes at 2:30 PM (the timing is 10:30 – 2:30). So I thought this day is over, and went back home to hear sarcastic remarks of my brother.

Day 3 (7th September 2000):

I was on the cashiers window at 10:30 in the morning. They have computerized that function, in the queue almost all

the people standing were touts (or agent as they called themselves). When my turn came, cashier scanned every attachment in my application and then asked me what it is, when I explained him, he told me he can't accept fee from me as this is not pre programmed in the system and I have to go to manual window. On the manual window the cashier wasn't there, he came after half an hour or so, accepted the fee for Rs. 10. when I asked him when should I come back to collect my license he replied to come back next Monday.

Day 4 (11th September 2000) :

I went to the RTO office at around 11:30 am. I went to a clerk who was the only person seem to be working, he kind of fished out my application from the pile of paper, and asked me whether it was mine. He asked me to come next day 4:00 PM and he'll get my license ready, the reason for this he gave me was he had to get a special order to issue me driver's license.

Day 5 (12th September 2000) :

I was there at around 3:00 PM. At that

time all of the staff at that office was having lunch. After waiting for around half an hour, the clerk I spoke with came to his desk, fished out my application from the pile of paper, and asked me whether it was mine. He later told me that there was a mistake and I was supposed to pay Rs. 50 as fee. By this time cashiers window was closed, so he suggested that he'll pay the money from the back door on my behalf if I wait there for a while. I was standing there for almost an hour, nothing happened. In the mean time Mr. xxxxxx came there and asked me what's going on, when I explained him he wrote on my application instructing cashier to accept the fee and gave me the whole application and asked me to go to the cashier and request him to accept the fee.

When I went to the cashier and tried to speak with him, I felt like I was talking to a stone. He looked up after a while and told me that window is closed and he has to do lot of work of keeping the cash register in order, at the same time he accepted money from an agent.

When I requested him once again I did not receive any reply whatsoever, when I asked him that I want to speak to his supervisor, he bluntly replied that he doesn't have any supervisor (I did not loose my temper at any time). So I thought this work can't be done and I have to come next day, while on my way out I saw office of PRO (public relations officer). I thought let me go inside and at least file a complaint about the whole thing. PRO seemed to be a very nice guy, however he refused to accept my complaint, diplomatically telling me that nothing is going to happen doing that, and he suggested me to come next day. I literally burst into laughing, he later suggested me to go to the head cashier and present my case. Head cashier wasn't in his office he came after a while, I explained the situation in Marathi, to which he replied that they can't accept the fee as the time is over. When I pointed out that cashier was indeed accepting money from agents then why I am being singled out, hearing which he wrote on my application instructing the cashier to accept the fee (by this time I have 4

instructions on my application). When I went to the cashier, he apologized and while writing down the receipt he explained to me in how constrained environment (full of agents) they have to operate. I took my paperwork and went back to Mr. xxxxxx he asked me to come next day and promised me that the license'd be ready.

Day 6 (13th September 2000) :

I went around 3:15, as usual the staff was at lunch (I should have learnt from the previous events), after a while when clerk came to his seat, he again fished out my application from the pile of paper and asked me whether it was mine (he asked me in a tone as if I am coming there for the first time), after which he told me to wait while he prepare my license. After 20 minutes or so I had my driver's license. When I came out while checking the things, I found my date of birth incorrect, I thought of going back but reserved that for my next visit.

I observed two features in that office (which was there before as well, however in different proportion):

1) There is absolutely no respect of any human being in that office, people speak so rudely with you that no respectable person would dare to go in there.

2) Work has become much slower, as compared to my previous experiences, inspite of all the talks about liberalization and e-governance.

Now I know that there are whole lot of administrative officials in this list, I want to ask them why this situation? I feel it's bureaucrat's responsibility for fixing this problem as no amount of economic prosperity can fix this.

I know that we are used to talking big issues on this list (like socialism vs capitalism, tax reforms, Govt. monopoly etc), however I'd like to draw attention to these small issues, solutions to which would bring whole lot of conveniences and dignity to the common men's life.

Manish

Ref. No. 9

Problems identified

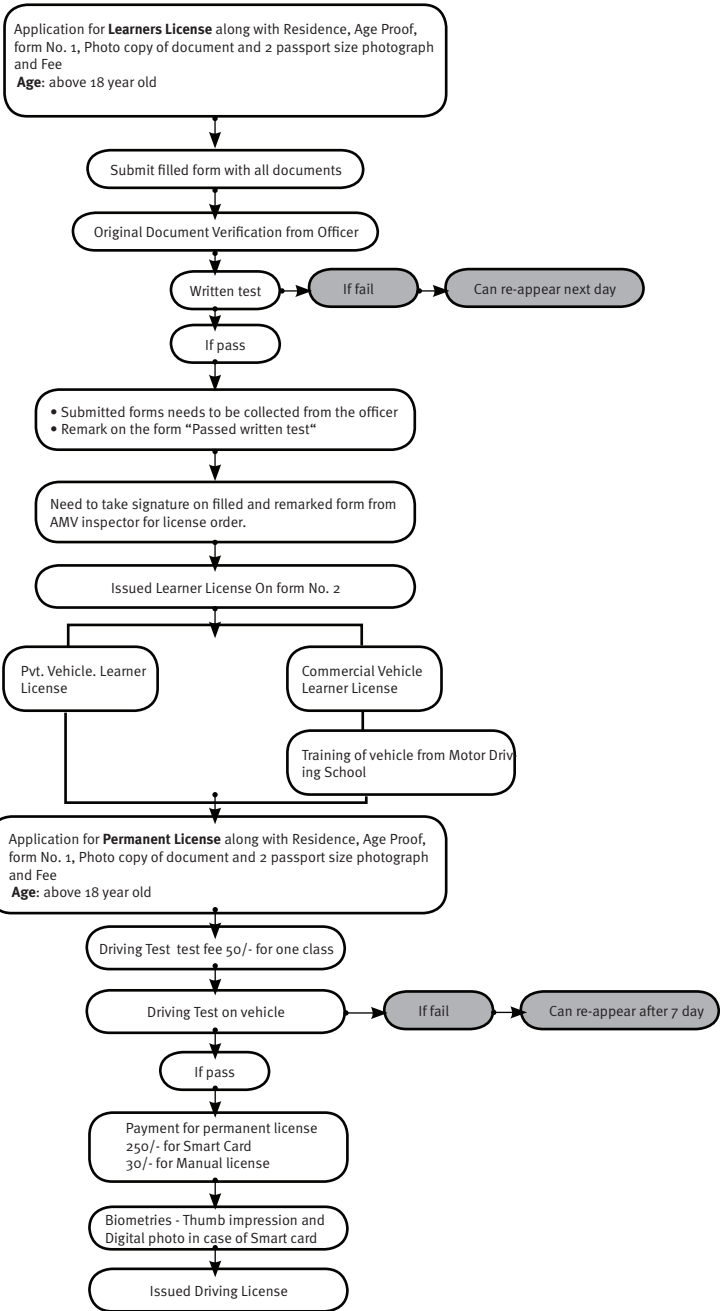
- No information is provided
- There is no information to link the process and place within the RTO.
- There is a developed tendency of approach the third party is completing work.
- More time and stress is found to be common.

Following are the observed reasons for depending on agents to complete the task.

- No complete knowledge about the process and place
- People want to complete the task with in no time and strain
- Frustration created in similar condition

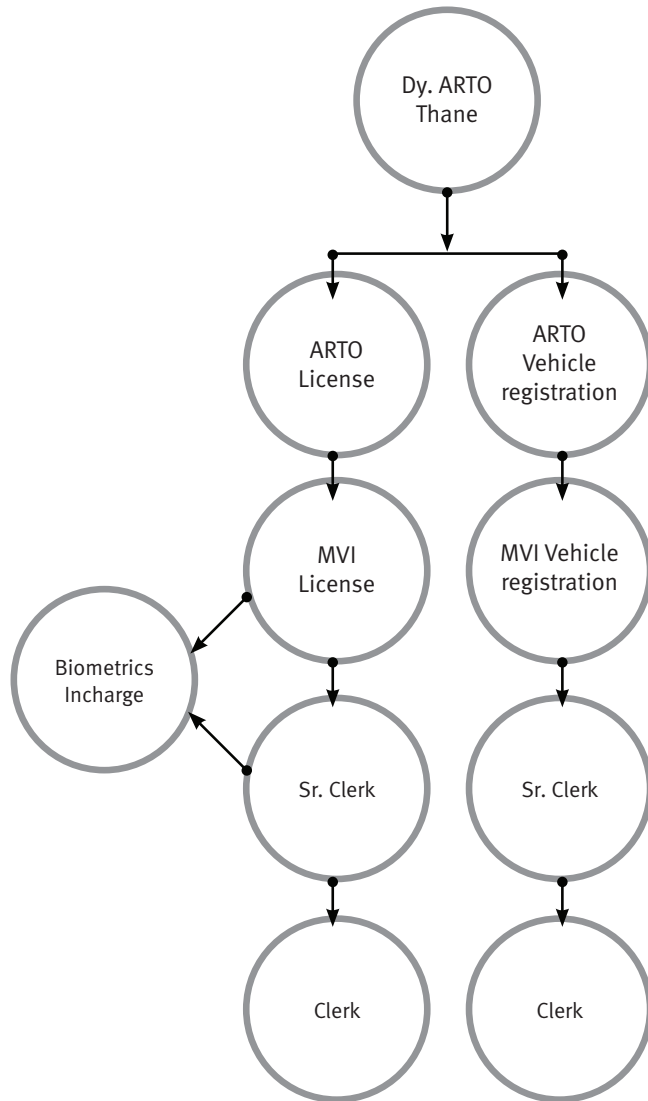
- Form No. 2
- Residence proof
- Age proof
- Passport size 2 photo
- License fee
- 30 Rs. for learners license
- 250 Rs. for permanent license
- Xerox copy of all document
- Age: above 18 year old

Only for Illiterates Verbal Test, Objective type Questionnaire
6/10 Marks Required to Pass



Work flow of getting learners license process

Work flow shows how to get learners license and permanent license and what are the documents and important things need to do during this whole process.



Work flow model

Hierarchy in the RTO. Office

RTO (Thane - License and registration department)

Dy. ARTO = Deputy Assistant Regional Transport Officer

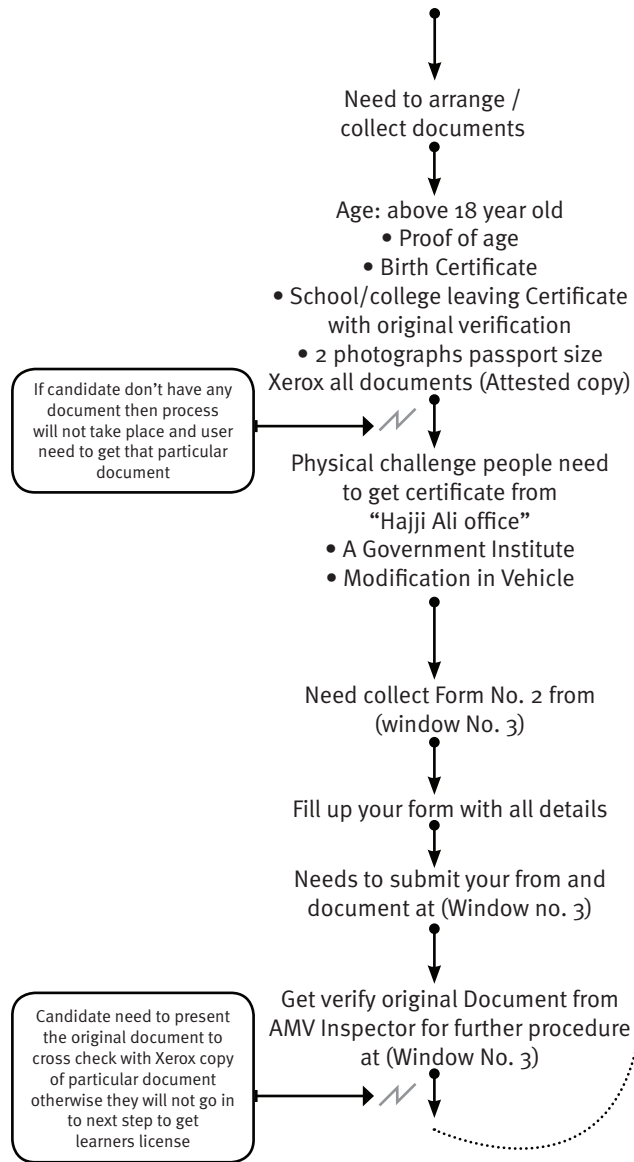
ARTO = Assistant Regional Transport Officer

MVI = Motor Vehicle Inspector

Sequence model of learners license process

Sequence model shows how to get learners license and permanent license and what are the documents and important things need to do during this complete process.

Trigger - To get Driving license



you need to give a test (Road Regulation rules)

- 10 objective questions
- 10 marks, each question = 1 marks
- 6 marks is minimum require to pass

After appeared in test Candidate will get remark on the filled form (Pass or Fail)

Candidate need to take signature from AMV Inspector for learners license order

Filled form and Fees for learners license need to submit at (Computer room) 30/- for learner license

After paying fees at (Computer Room) Candidate need to go to the (Biometrics section) For thumb impression and digital photo

Candidate need to wait for 2 to 3 hour to get the learner license
Candidate will get laminated normal learner license that valid for 6 month.

- After 1 month or before 6 month candidate able to apply for permanent License

For Permanent License Candidate need to fill the "Form 4"

- With three stamp size photograph
- Original learner license

Age: above 18 year old

- Proof of age
- Birth Certificate
- School/college leaving Certificate with original verification
- 2 photographs passport size
Xerox all documents (Attested copy)

Need to pay for Driving test

Candidate need to arrange the vehicle for driving test in front of AMV inspector

After test drive candidate will get remark on the filled form (Pass or fail)

if pass then candidate need to pay for permanent license

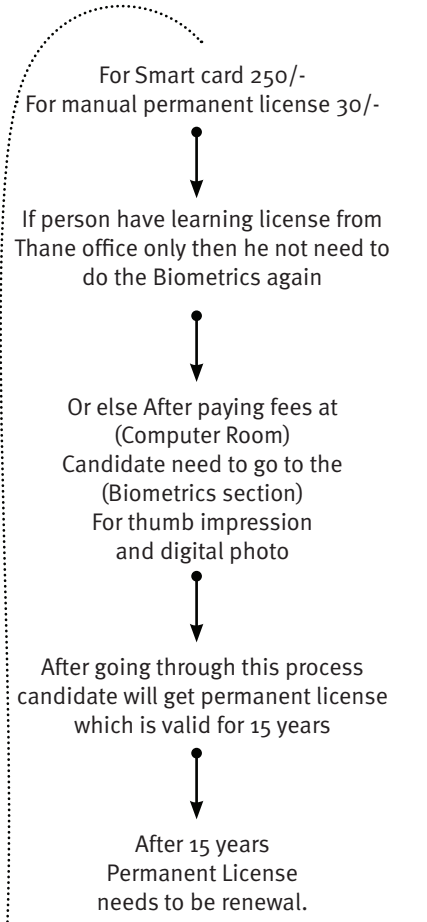
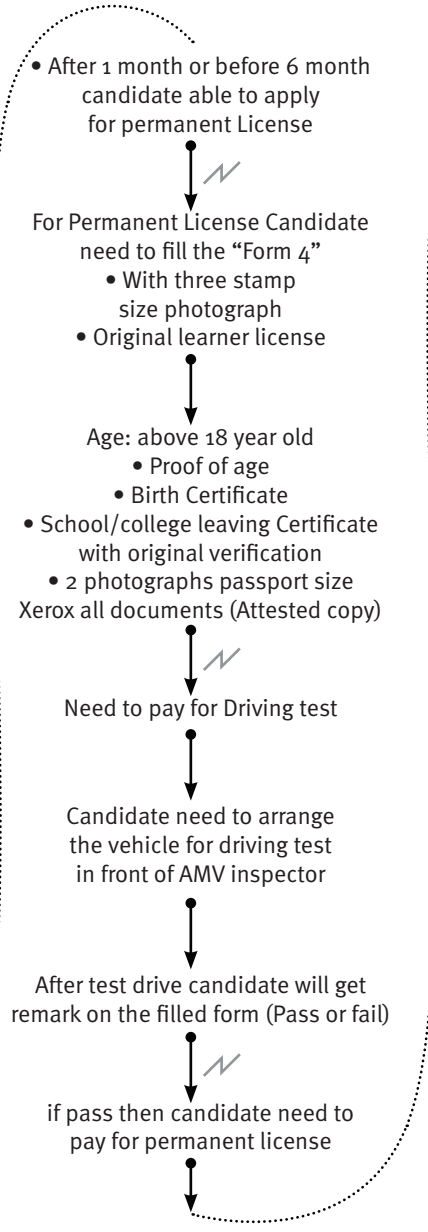
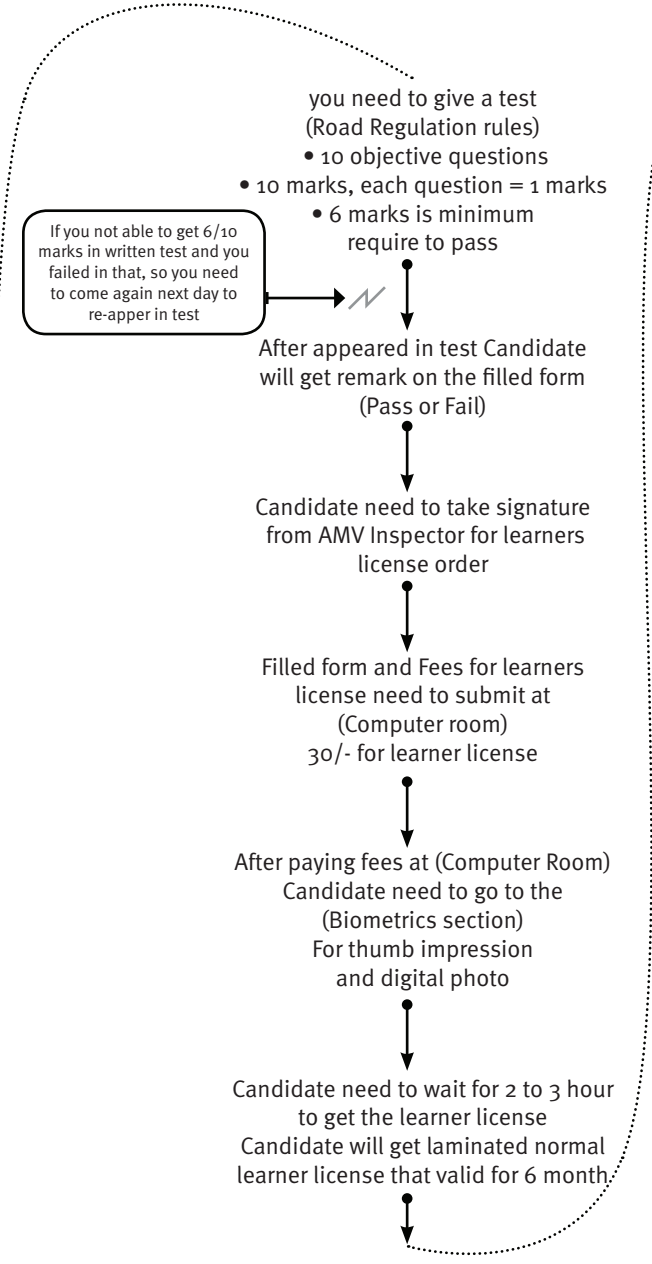
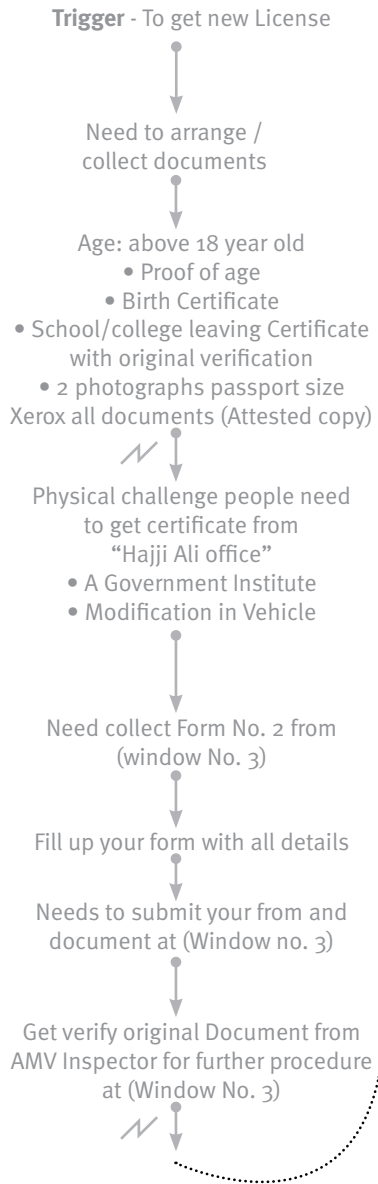
For Smart card 250/-
For manual permanent license 30/-

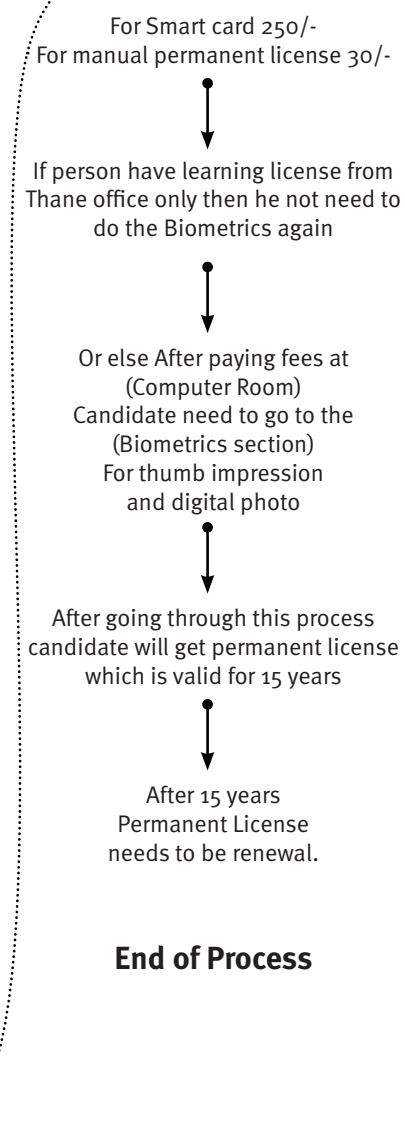
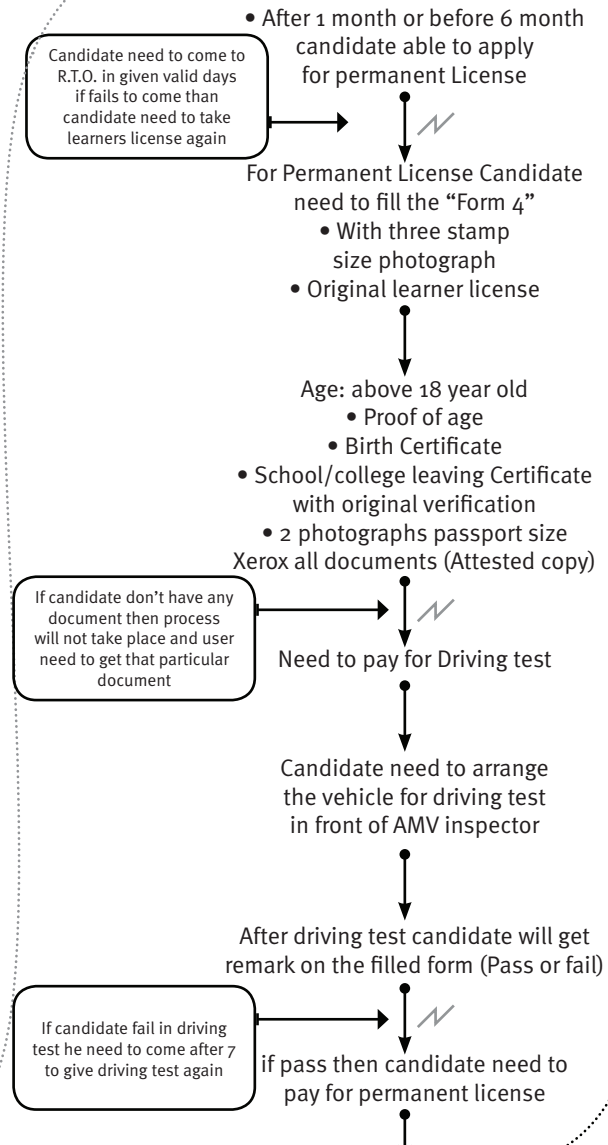
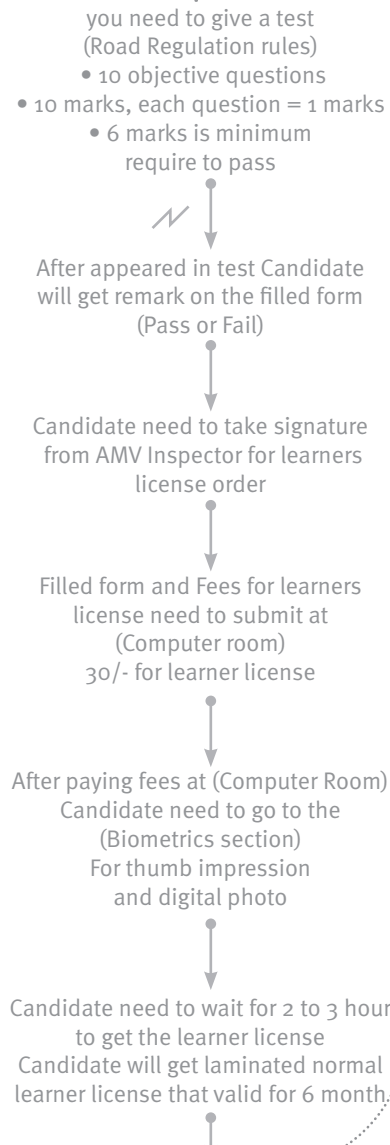
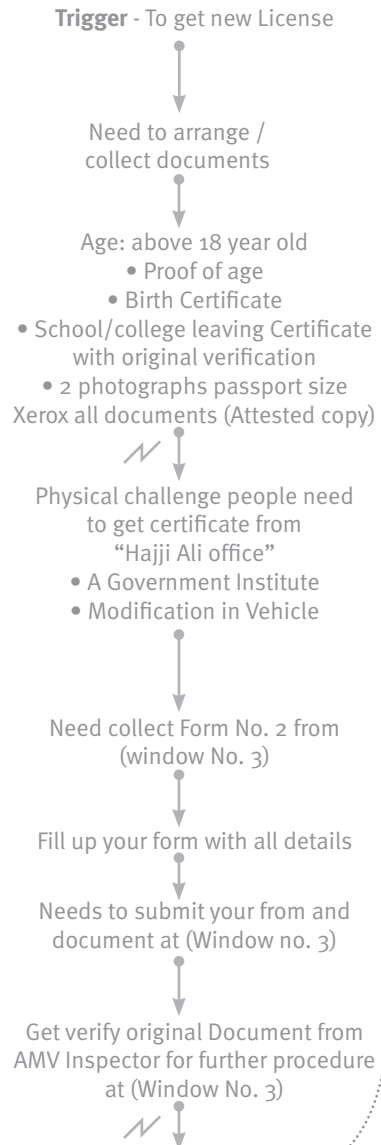
If person have learning license from Thane office only then he not need to do the Biometrics again

Or else After paying fees at (Computer Room) Candidate need to go to the (Biometrics section) For thumb impression and digital photo

After going through this process candidate will get permanent license which is valid for 15 years

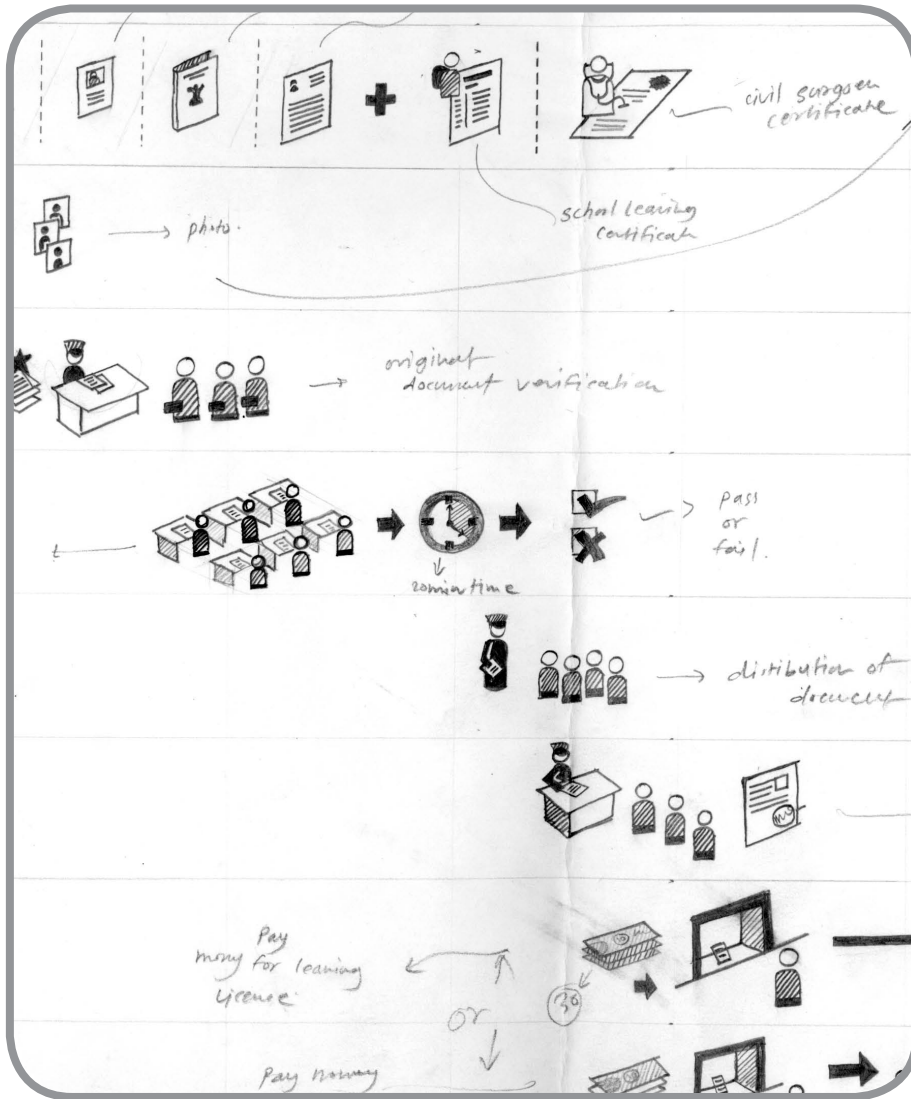
After 15 years Permanent License needs to be renewal.





Objectives

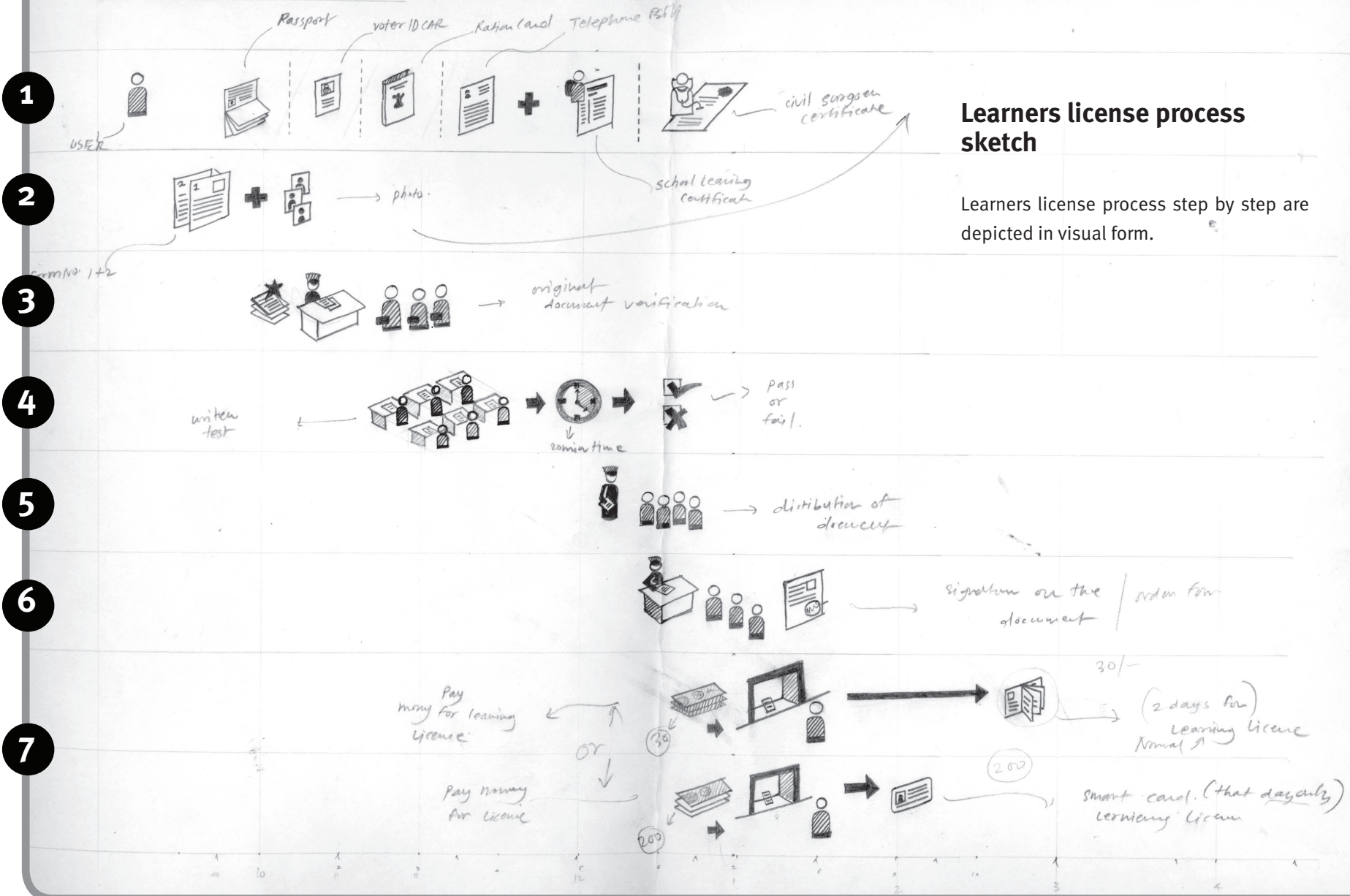
- To convey the various RTO procedure through information graphic
- The user should be able to perform his own task without any help
- The complete process should be allow the user to estimate his work time
- The information should be convey all the details the user expect as many of them come from various background for completing varied task
- To derive a information graphic that clearly convey the procedure to novice user without ambiguity
- The information should be picturize the set of document, person to see, verification to be made and certificate to carry along with the user
- The information conveyed has to be improve the existing system together decrease the delay caused in the complete system



Initial Sketches and Process understanding

This initial sketches of learners license and permanent license process are explored and depicted in visual form and these sketches are tested on the user.

LEARNING LICENCE



Learners license process sketch

Learners license process step by step are depicted in visual form.

User Testing on Learners license sketch

- (No 1) Passport icon - cover page of passport needs to have emblem then it will get more clear
- 3rd and 5th row - Is this the same person for the particular step?
- 3rd and 5th row - Not able to find out difference between these two steps
- (No 3) The Icon desk is not clear
- (No 4) Step of written test is clear
- (No 5) Officer to give away the document to the candidate is not clear to user
- (No 6) Signing on the document not clear
- (No 6) Signature from who and where?
- (No 7) User not able to that where to pay money
- Final ending of the process not emphasized.
- Steps need to mark as numbers (1,2,3...)
- User understand the sketch in terms of steps of the processes

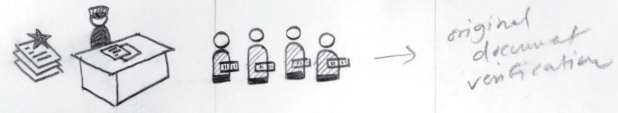
PERMANENT LICENCE

1



Permanent license process sketch

2

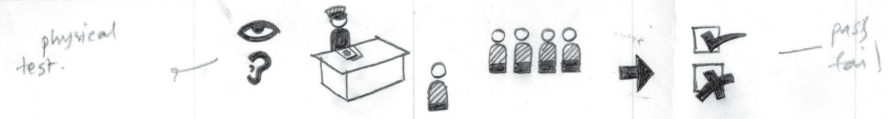


Permanent license process step by step are depicted in visual form.

3



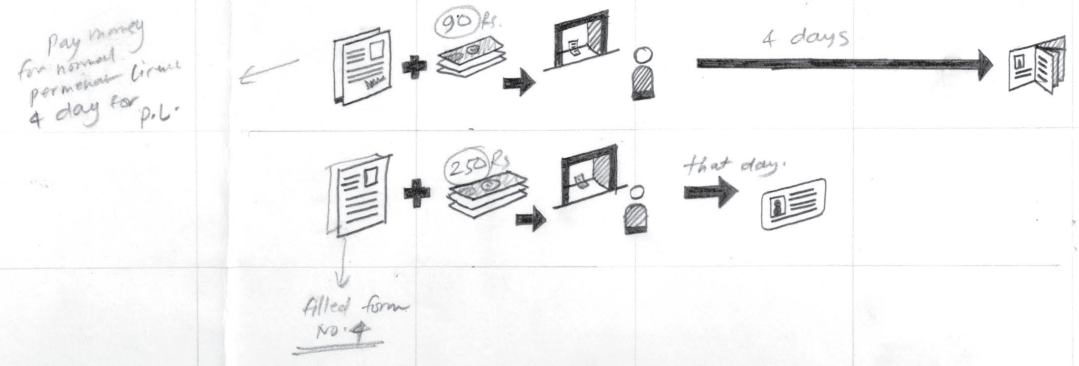
4



5



6

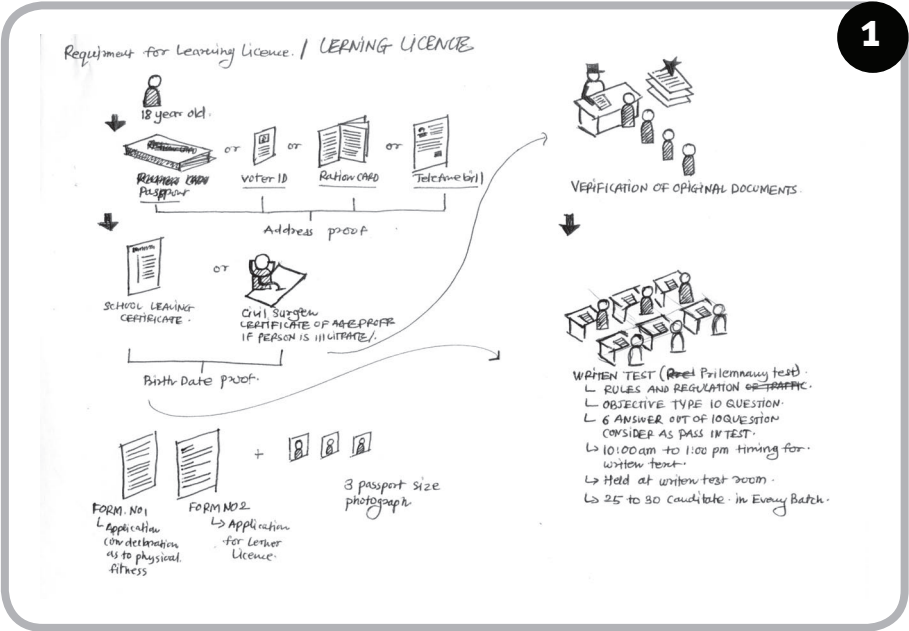


User Testing on Permanent license sketch

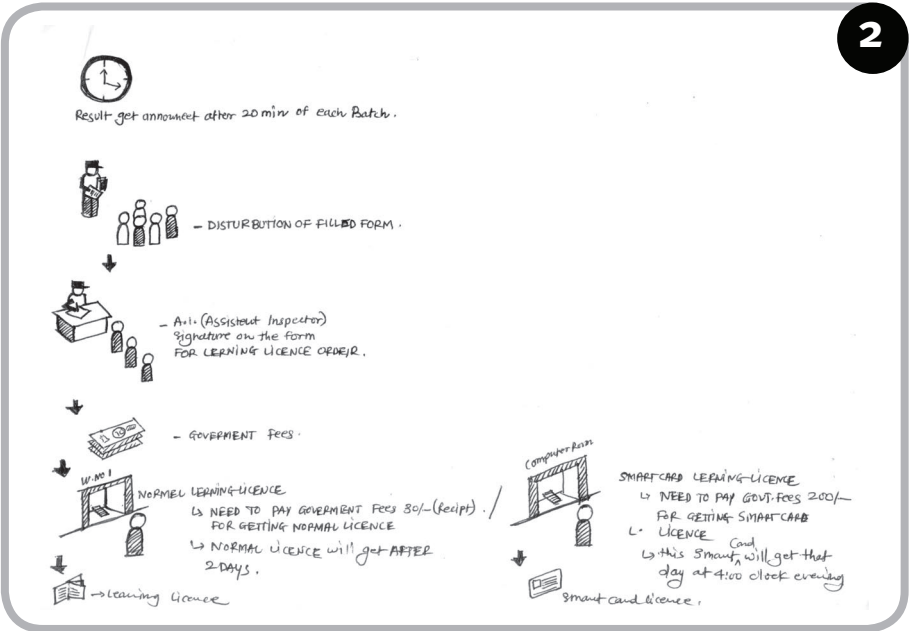
- (No 1) Passport icon - cover page of passport needs to have emblem then it will get more clear
- Is all graphics connected? Not clear indication for processes steps
- (No 1) School leaving certificate is not clear
- (No 1) What dose (+) plus sign symbol means? User relating this icon to medical industry
- (No 3) Step is not clear to user but user get indication that some payment need to do but where and for what is not clear
- (No 4) Icon of the inspector is not clear
- (No 4) This step is clear to user
- (No 5) Driving test is clear but pass and fail icon not clear to user
- (No 6) payment for license step is clear but user not able to understand how much time take to this particular task
- (No 6) this steps look like a two different steps. User felt that they need to do this two steps one after another

Learners license sketch

1

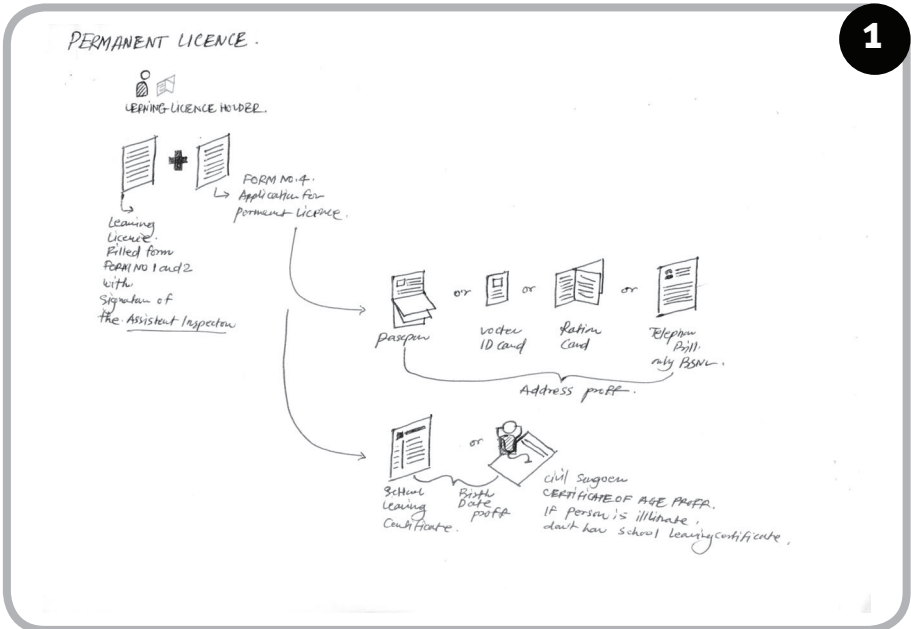


2

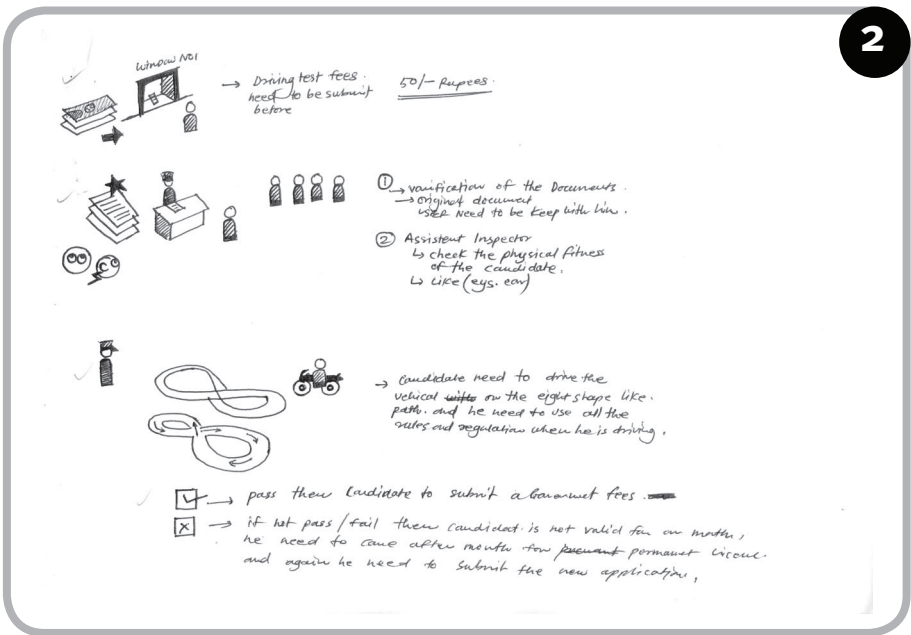


Permanent license sketch

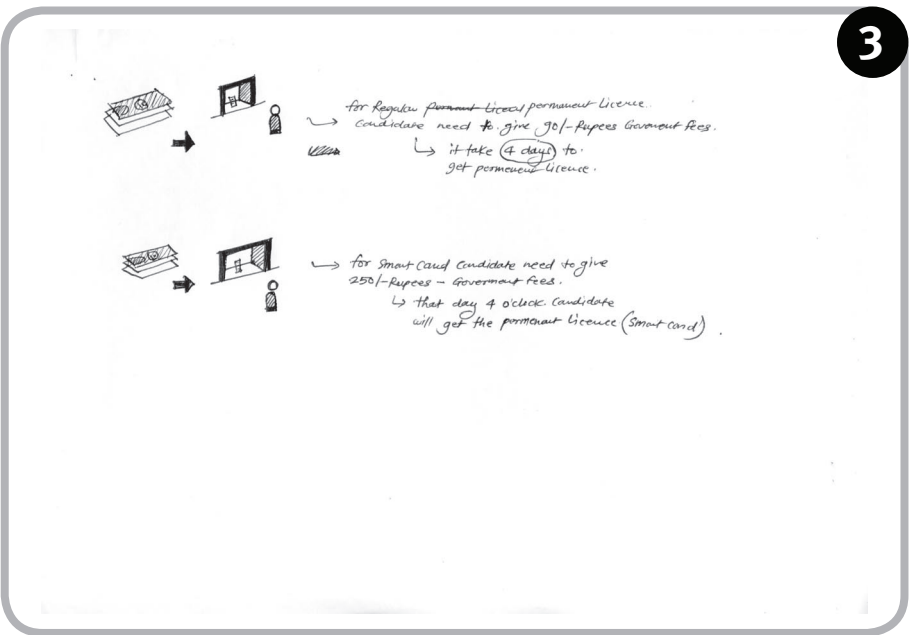
1



2

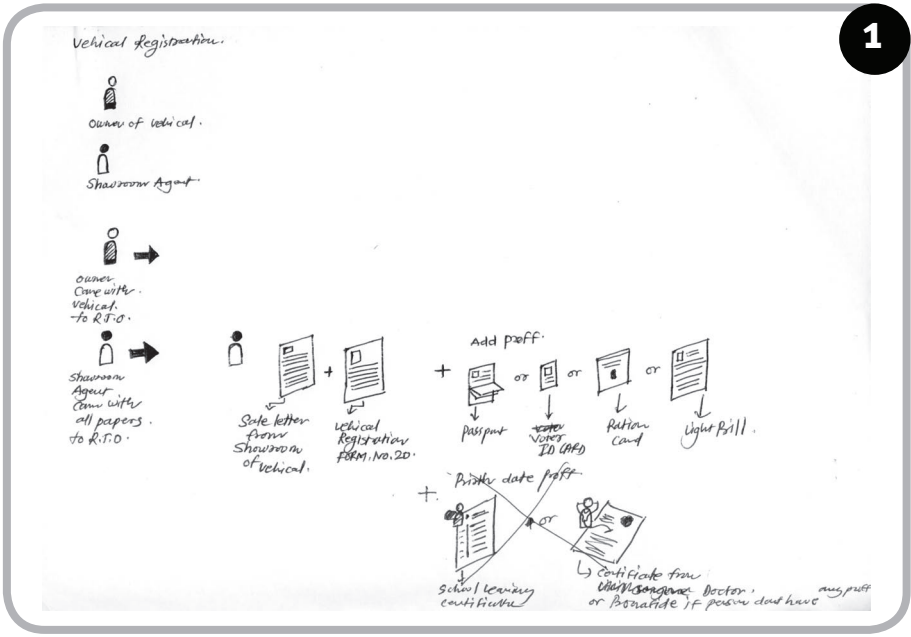


3

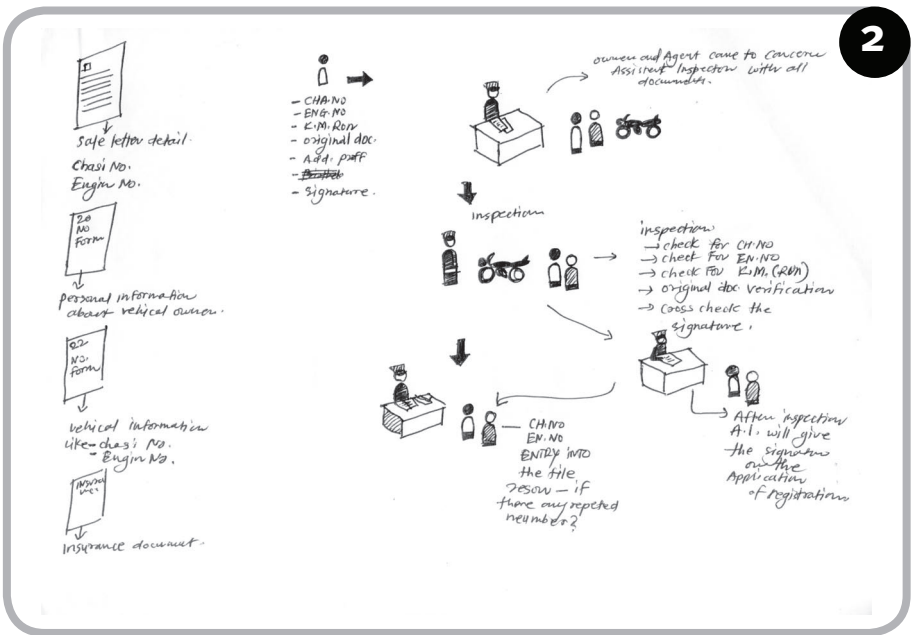


Vehicle registration sketch

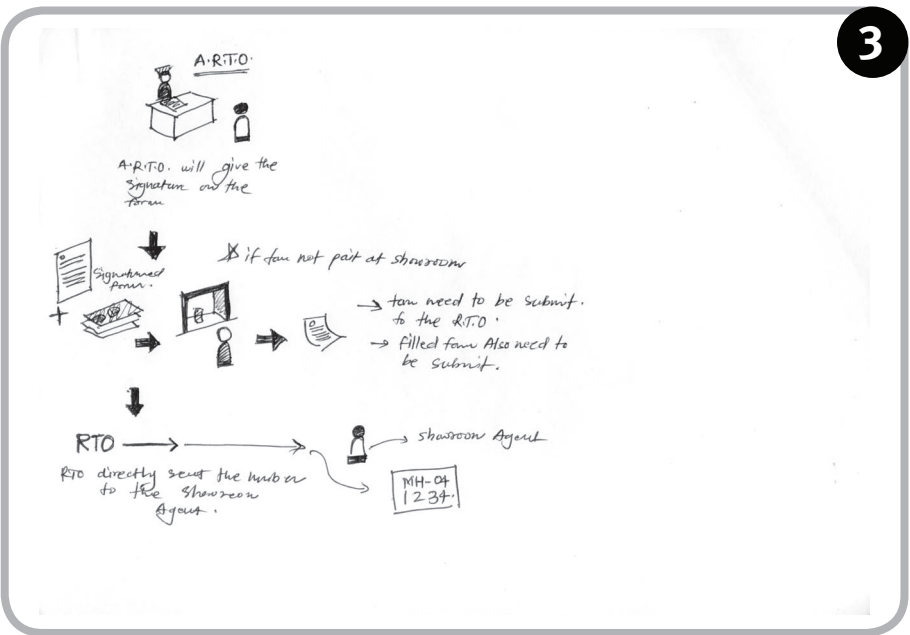
1

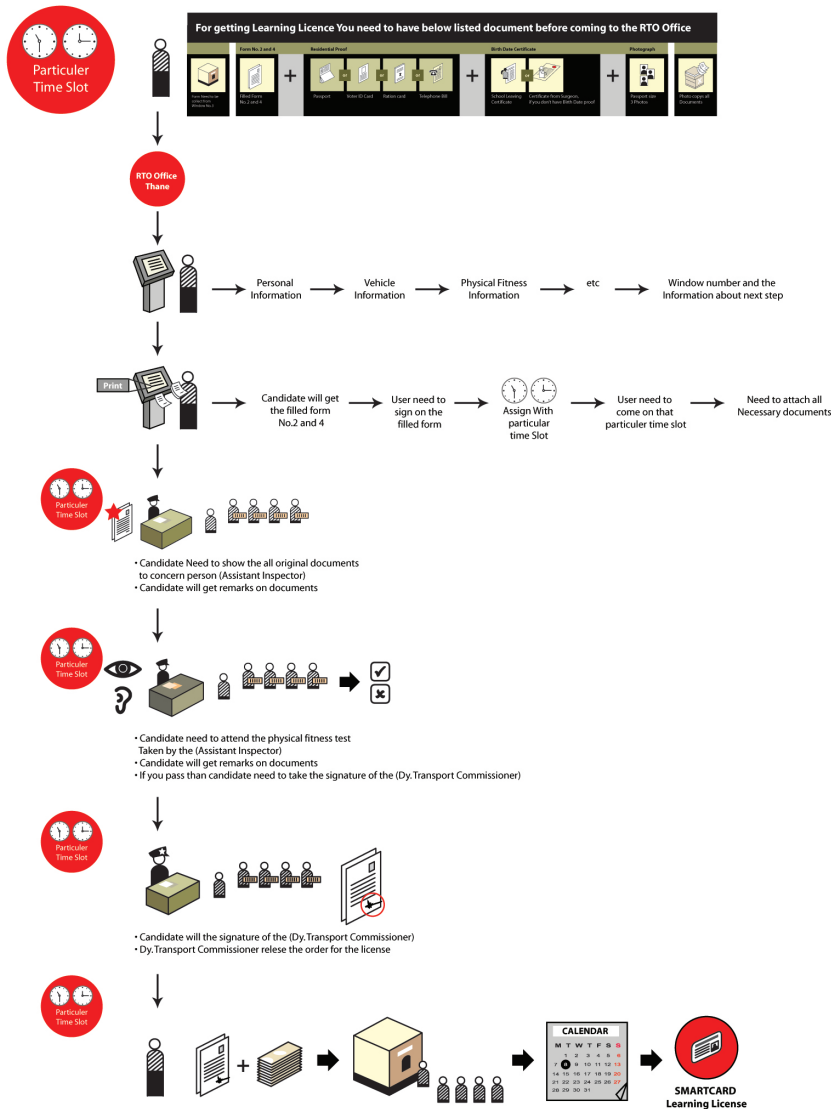


2



3





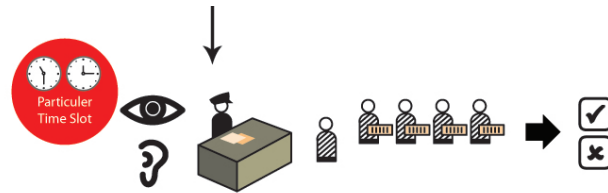
Design solutions

Concept 1 - Time Slot

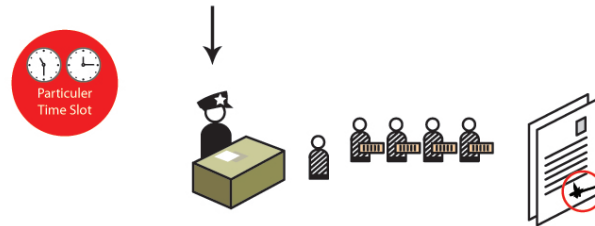
This concept basically oriented to accommodate data entry and storage kiosk where in the user gets to enter and get a time slot for doing his task. The layout is worked with time as a basis and the flow is vertically followed for guidance to the user. The user get printout of the same once he entered his detail in to the kiosk installed which is the major advantage of this system.

Problem

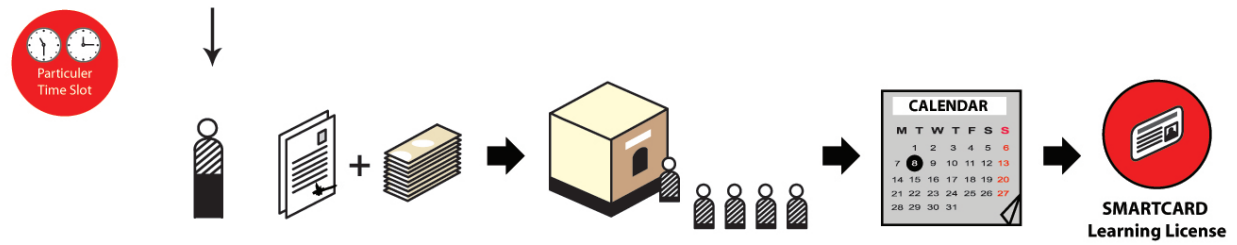
Since the user from varied field entering data will be a complex procedure which intern consumes time for each of the user. Installation of the kiosk and the number of the kiosk found to be unfriendly in the mind of people when it was tested. They found entering data in system is a quite complex compound to manual writing which is more efficient.



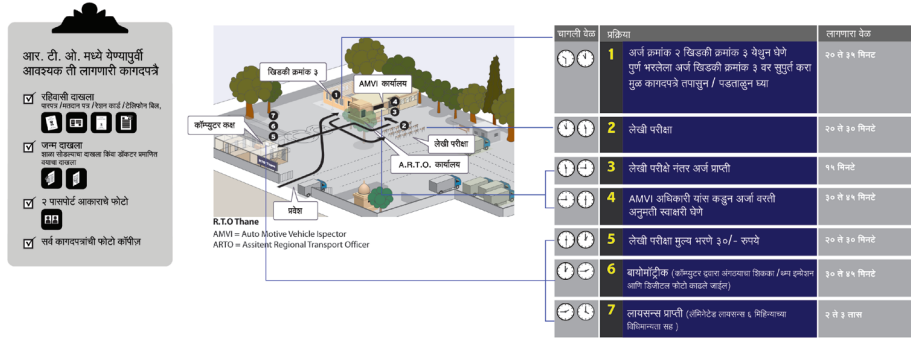
- Candidate need to attend the physical fitness test Taken by the (Assistant Inspector)
- Candidate will get remarks on documents
- If you pass than candidate need to take the signature of the (Dy.Transport Commissioner)



- Candidate will the signature of the (Dy.Transport Commissioner)
- Dy.Transport Commissioner relese the order for the license



लर्निंग लायसेन्स मिळवण्यासाठीची आवश्यक ती माहिती

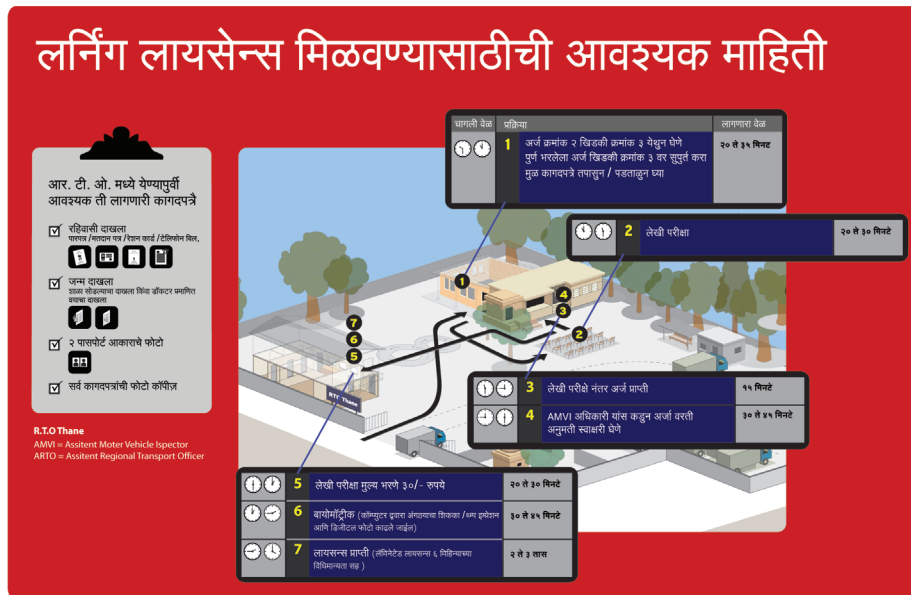


Design solutions

Concept 2 - Infographic / Information Graphic

Our brain love to think and memorize in visuals, also we imagine the relationships between objects and information in visuals, not in words. Try this – If I say Pen, Paper, Computer and Telephone - what comes to your mind first? Does alphabets (P-E-N) appears first to you? Or the actual visuals of the objects recalled from your memory. Also didn't you just visualize your working desk? As all the objects (Pen, Paper etc) immediately made a pattern in your mind and formed a context your mind spontaneously visualized a 'complete' picture. Infographics represent data in a visual format which is easier for brain to articulate.

लर्निंग लायसेन्स मिळवण्यासाठीची आवश्यक माहिती



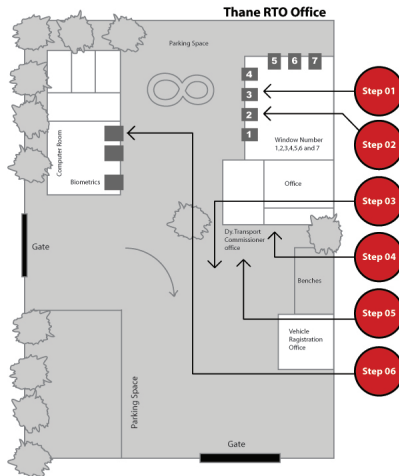
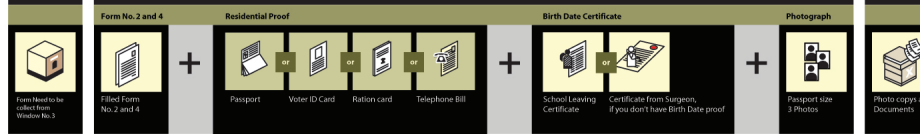
The concept is desired to drive the user to read through the procedure in a simple and fast way the main components first, then the procedure and location, then the step and detail in the later stage.

The complete process has been resolved into simple components where in the major task like what are the documents to be carried?, What is the approximate time limit and location? were demarcated and highlighted to easy understanding on the top of the layout.

The information board also consist of visual graphic at require position together explanation for necessary steps.

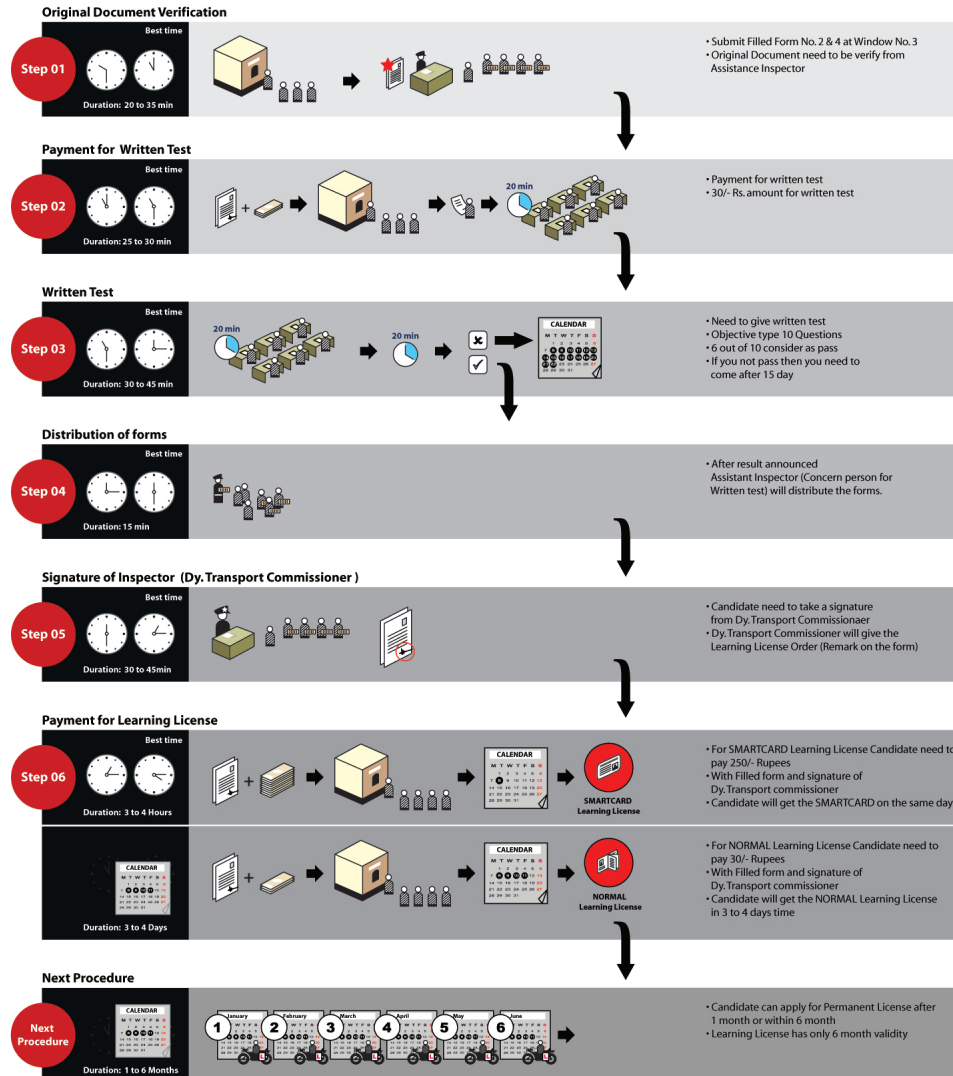
Information for Getting Learning License

For getting Learning License You need to have below listed document before coming to the RTO Office



	Candidate
	Assistant Inspector
	Dy. Transport Commissioner
	Learning License holder
	Candidate with receipt
	Candidate with document in lane
	Best Time
	Duration for Process
	Months
	Counter / Window
	Money
	Document
	Original Document
	Pass / Fail
	SMARTCARD License
	Normal License

This is not an actual size of the graphic



Information Graphic

After preliminary study of learners license process and RTO this is the first executed option for information graphic for learners license.

Clarification

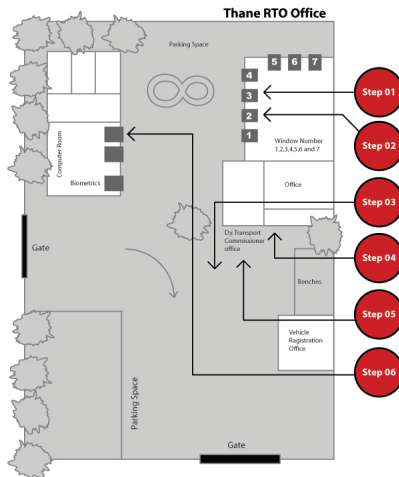
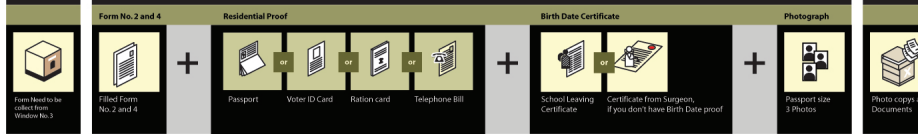
- Comprises of header that represent the necessary document to be carried in the form of visual graphic.

- The layout consist of the location map on to the left and each of the process sequence on the right side.

- The page graphic also consist of the description of signs and symbols used.

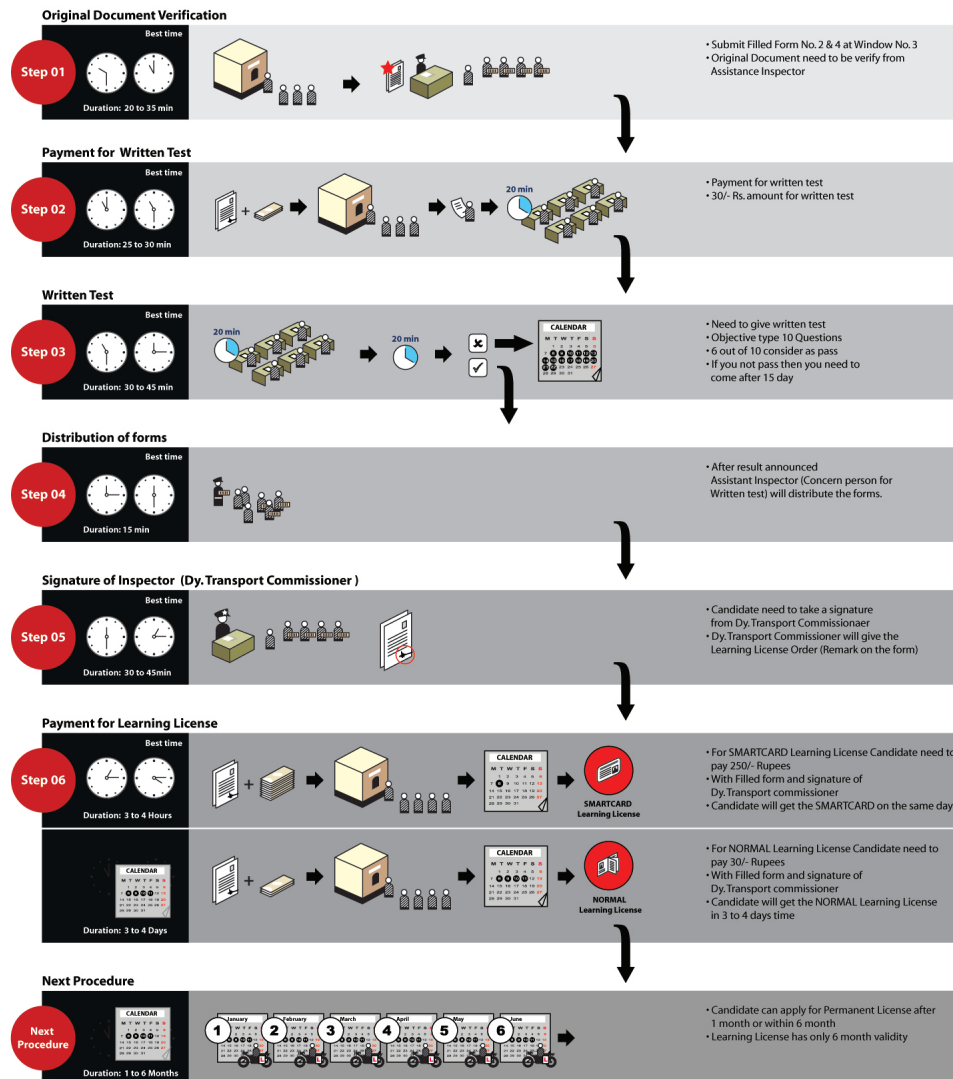
Information for Getting Learning License

For getting Learning License You need to have below listed document before coming to the RTO Office



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	Assistant Inspector
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	Learning License holder
	Candidate with receipt
	Candidate with document in lane
	Best Time
	Duration for Process
	Months
	Counter / Window
	Money
	Document
	Original Document
	Pass / Fail
	SMARTCARD License
	Normal License

This is not an actual size of the graphic



Hierarchy

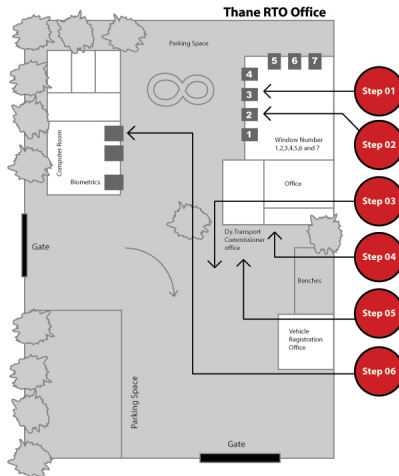
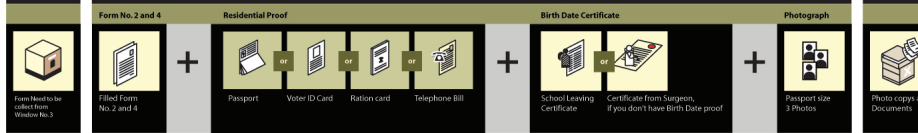
- The top header flows with forms to carried / necessary documents
- The right side of the graphic consist of steps, time require, best time for particular step and small description of the same
- Provided location map on to the left side with description of the sign & symbols

Mode of representation

- Use contrast color for more clarity
- Gray shade value represent progress of the steps
- Red color used for step numbers
- Used clock icon to represent the best time for particular step
- Iconic representation used for Necessary document, Document verification, Written test, Payment for learners license etc. to help user to understand visually

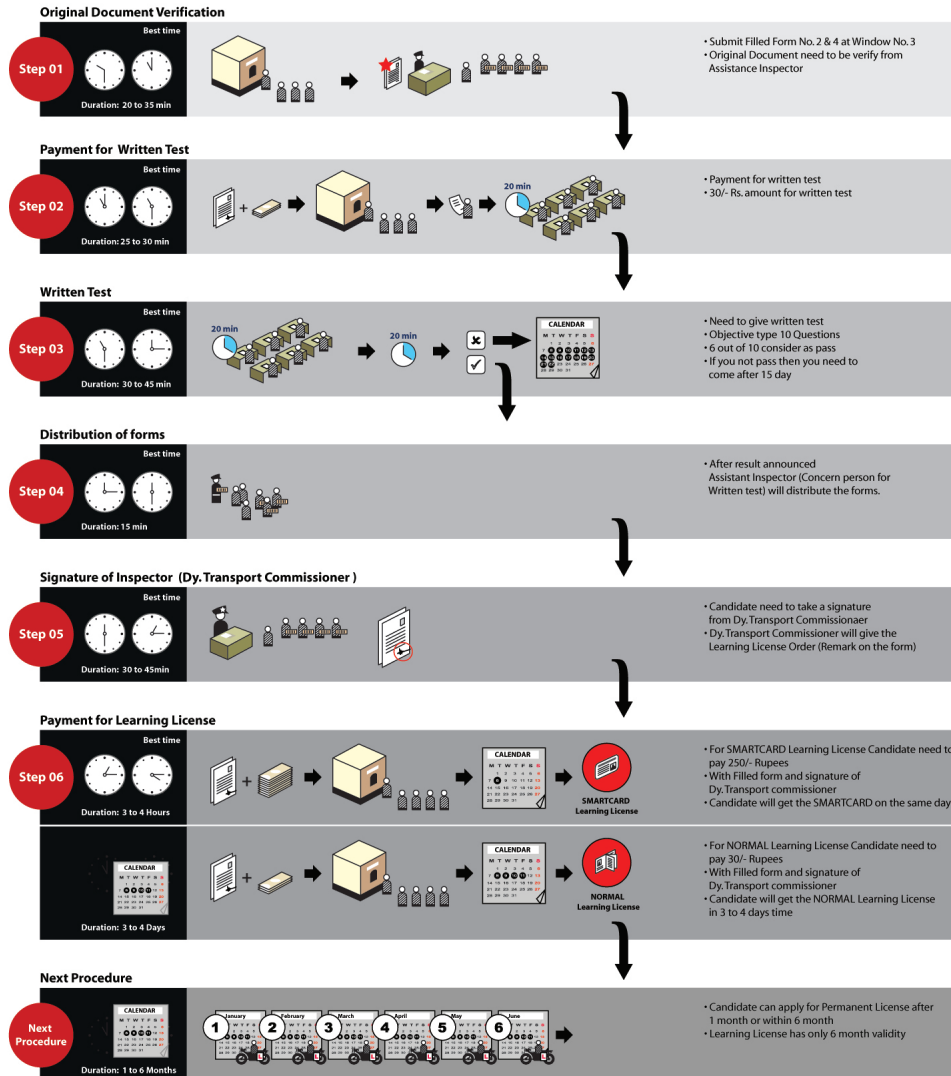
Information for Getting Learning License

For getting Learning License You need to have below listed document before coming to the RTO Office



	Candidate
	Assistant Inspector
	Dy. Transport Commissioner
	Learning License holder
	Candidate with receipt
	Candidate with document in lane
	Best Time
	Duration for Process
	Months
	Counter / Window
	Money
	Document
	Original Document
	Pass / Fail
	SMARTCARD License
	Normal License

This is not an actual size of the graphic



Problem identified after testing

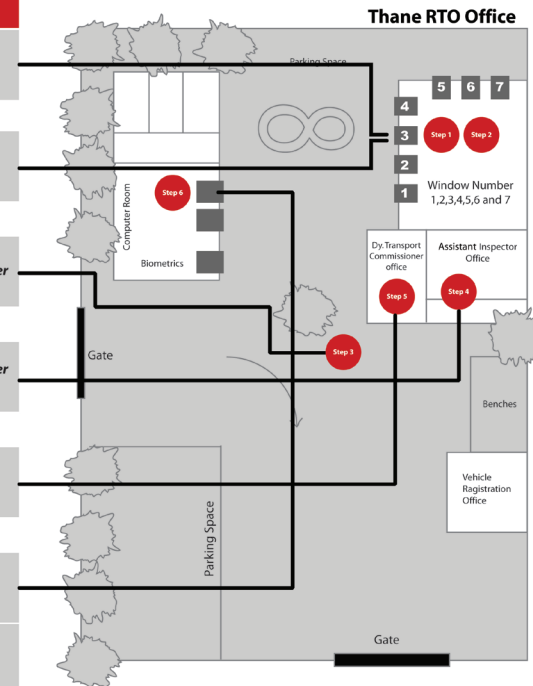
- information overload
- User need specific information
- Confusion between steps and location
- Location is not clear
- Step header is not prominent
- No title for icons
- Text is not visible

Information for Getting Learning License

For getting Learning License You need to have below listed **Document and Particulars** before coming to the RTO Office

- 1 Forms need to collect from Window No. 3
- 2 Form No.2 and 4
- 3 Residential Proof
 Passport, Voter ID Card, Ration card, Telephone Bill
- 4 Birth Date Certificate
 School Leaving Certificate, Certificate from Surgeon, If you don't have Birth Date proof
- 5 Passport size 3 Photos
- 6 Photo copies of all Documents

Best Time	Duration	Concern Person	Location
Step 01	20 to 35 min	Senior Clark	Window No. 3
Original Document Verification			
Step 02	20 to 35 min	Senior Clark	Window No. 3
Payment for Written Test			
Step 03	30 to 45 min	Assistant Inspector	Outside Commissioner Office
Written Test			
Step 04	15 min	Assistant Inspector	Outside Commissioner Office
Distribution of forms			
Step 05	30 to 45 min	Dy. Transport Commissioner	Commissioner Office
Signature of Inspector (Dy. Transport Commissioner)			
Step 06	3 to 4 Hours	Senior Clark	Computer Room
	3 to 4 Days	Senior Clark	Computer Room
Payment for Learning License			



This is not an actual size of the graphic

Revised option for learners license process information graphic

- Reduced information and provided specific information as per used needs
- Segregated “Best time” and “Duration” for more clarity

- New column - “Concern person” added in the graphic to get clear understanding to user that whom to approach at particular step
- Location map moved to right side and connected to steps with directional lines
- Graphic divided in to the three part

- 1) Necessary Documents
- 2) Process steps
- 3) Location map

Problem identified

- Confusion between step numbers and necessary document graphic numbers

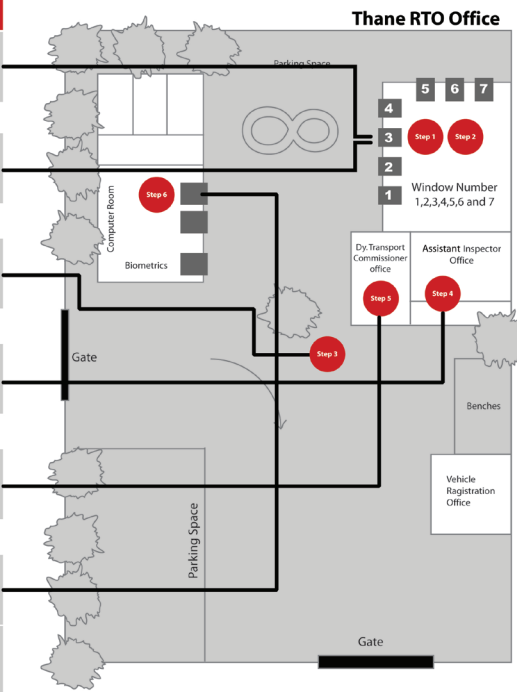
- Directional lines created complexity to understand the Location map
- Header of the steps is not visible and need to be more prominent
- Standard color need to be used
- Text is not visible

Information for Getting Learning License

For getting Learning License You need to have below listed Documents and Particulars before coming to the RTO.

- 1 Forms need to collect from Window No. 3
- 2 Form No. 2 and 4
- 3 Residential Proof
- 4 Birth Date Certificate
- 5 Passport size 3 Photos
- 6 Photo copies of all Documents

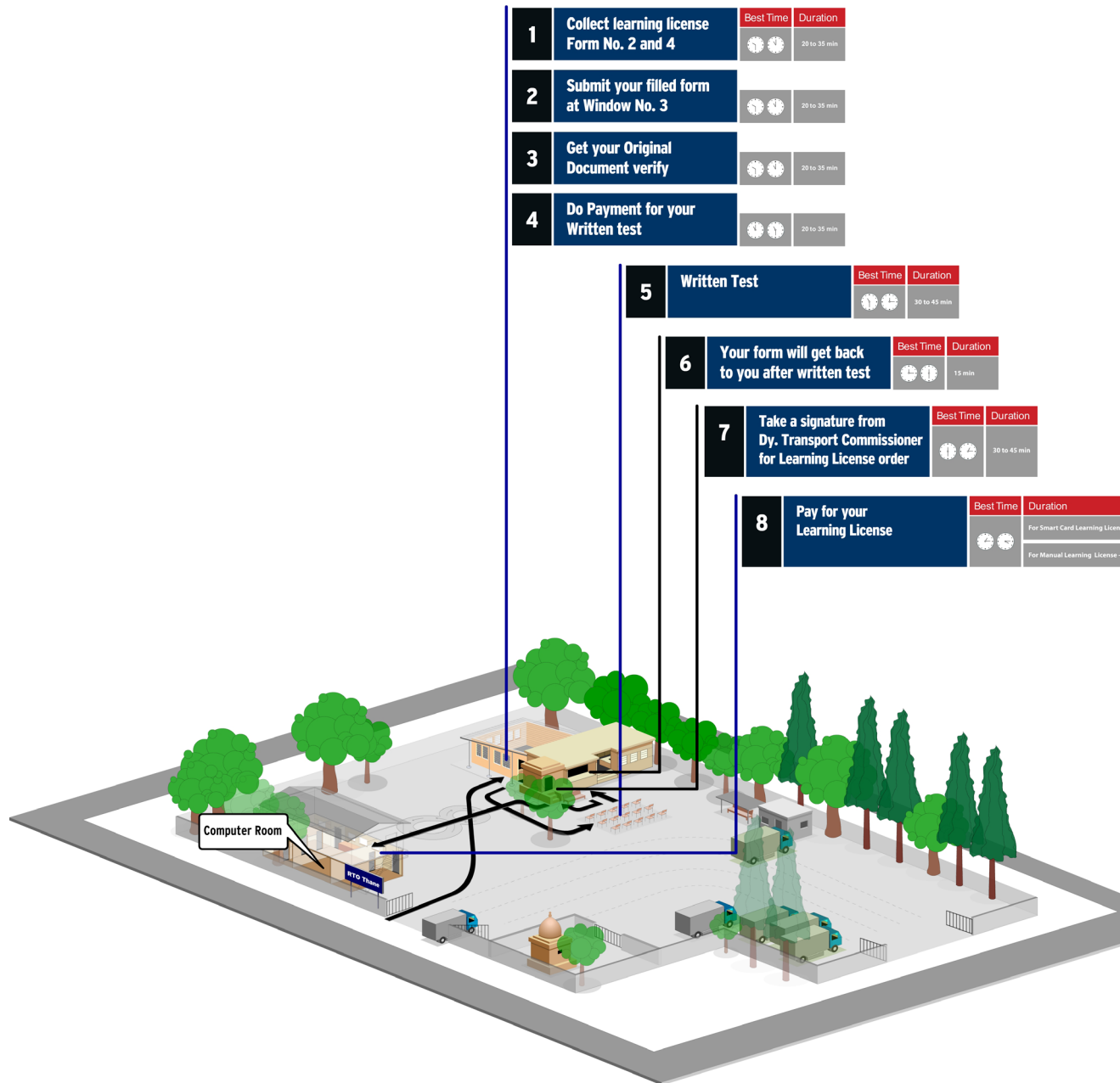
Best Time	Duration	Category	Location
Step 01	20 to 35 min	Senior Clerk	Window No. 3
Step 02	20 to 35 min	Senior Clerk	Window No. 3
Step 03	30 to 45 min	Assistant Inspector	Outside Commissioner Office
Step 04	15 min	Assistant Inspector	Computer Room



This is not an actual size of the graphic

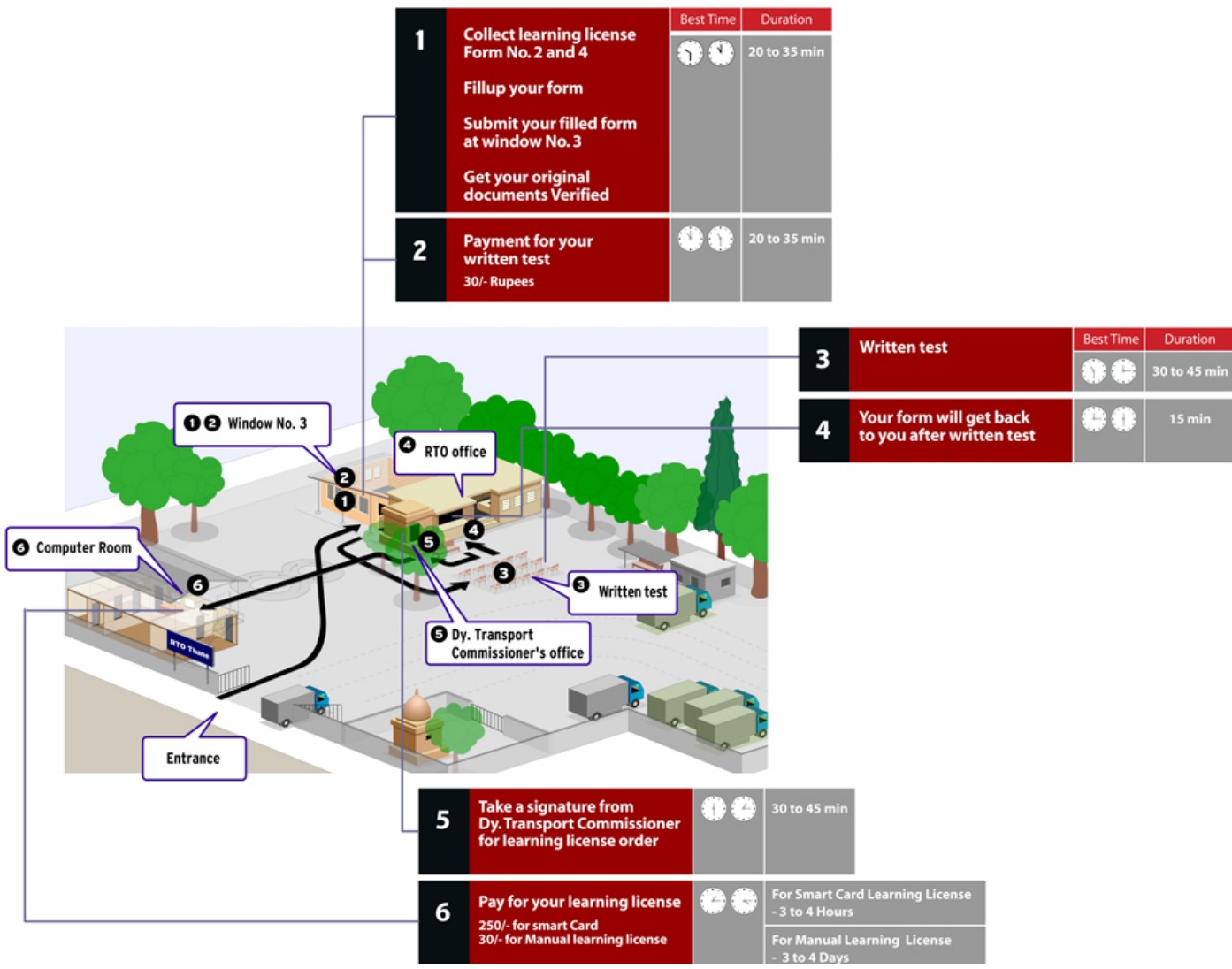
Payment for Learning License

Zoomed portion of the information graphic



Three dimension graphic for Location map

- In previous options both location map are not much clear indicative for the location. And decide to execute three dimension location map for particular location (Thane RTO - License department)
- Directional arrows added to follow the path for step by step process
- Steps graphic connected with location map to understand the particular location for particular step



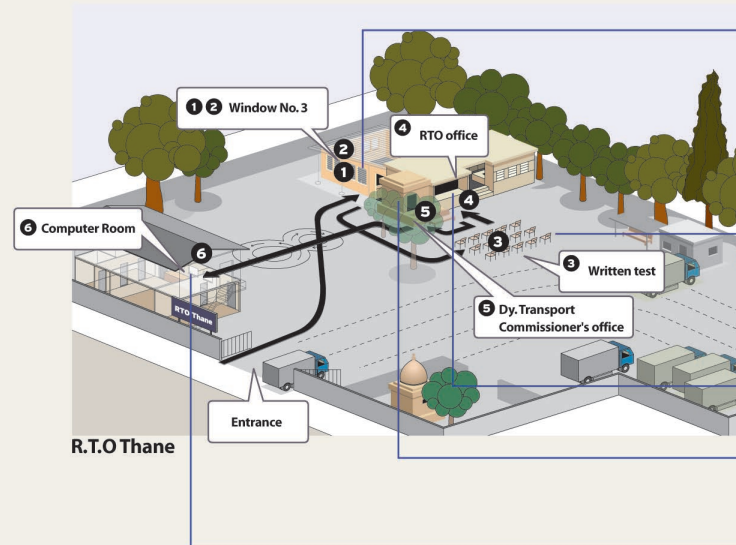
Three dimension graphic for Location map

- Another option with same three dimension location map
- Steps number added on the location map
- Name of the location added in the popup to get more clear idea about location
- Process steps graphic place near to specific location to get more clear idea and connection between steps and location

Information for Getting Learning License

For getting Learning License You need to have below listed **Document** and **Particulers** before coming to the RTO Office

- ✓ Form No. 2 and 4
- ✓ Residential Proof
Passport, Voter ID Card, Ration card or Telephone Bill
- ✓ Birth Date Certificate
School leaving certificate or Certificate from surgeon, if you don't have birth date proof
- ✓ 3 Passport size Photograph
- ✓ Photo copies of all documents



	Best Time	Duration
1 Collect learning license Form No. 2 and 4 Fillup your form Submit your filled form at window No. 3 Get your original documents Verified	🕒🕒	20 to 35 min
2 Payment for your written test	🕒🕒	20 to 35 min
3 Written test 30/- Rupees	🕒🕒	30 to 45 min
4 Your form will get back to you after written test	🕒🕒	15 min
5 Take a signature from Dy. Transport Commissioner for learning license order	🕒🕒	30 to 45 min
6 Pay for your learning license 250/- Rs. for smart Card 30/- Rs. for Manual learning license	🕒🕒	For Smart Card Learning License - 3 to 4 Hours For Manual Learning License - 3 to 4 Days

5 user tested on the above graphic

Task:

- follow the procedure to get the learners license
- Find out the particular window for

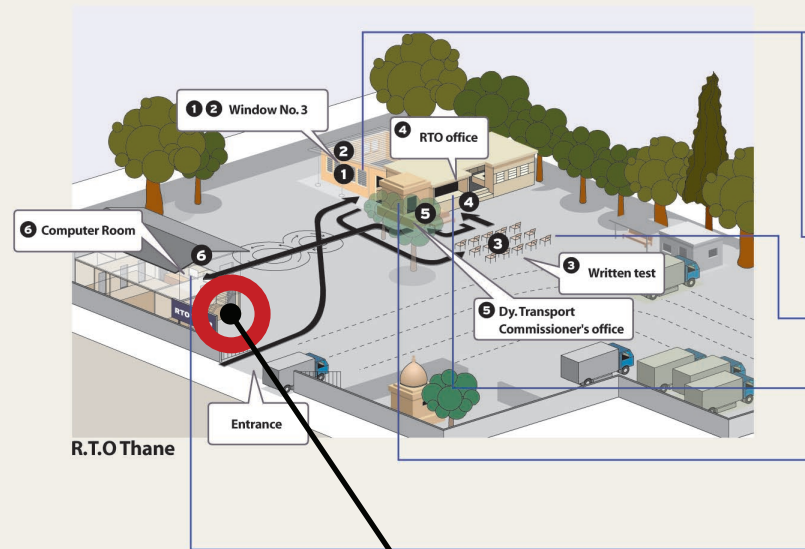
particular process

- Understand the graphic
- What are the document you need when you want to get the learner license
- What is the best time

Information for Getting Learning License

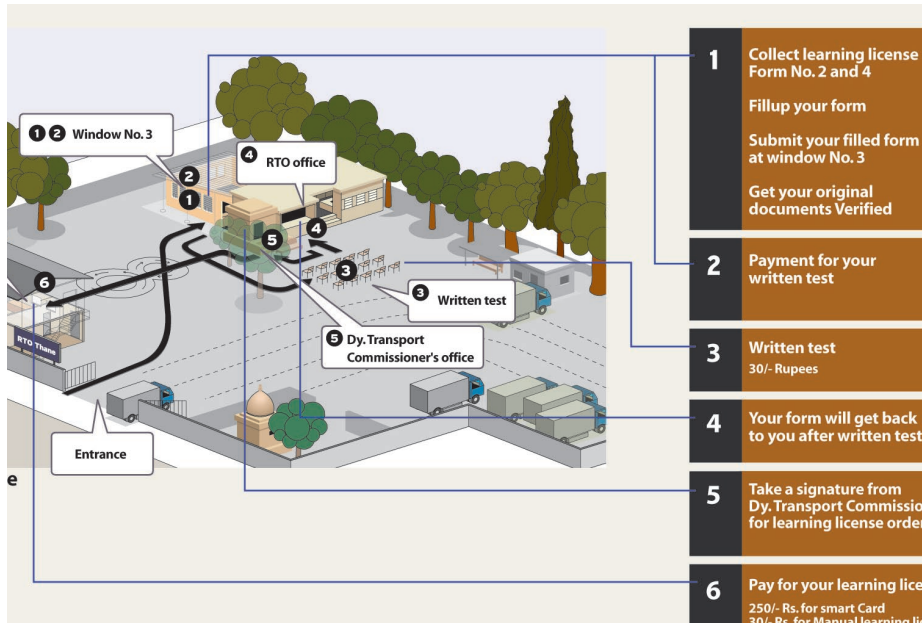
For getting Learning License You need to have below listed **Document** and **Particulers** before coming to the RTO Office

- ✓ Form No. 2 and 4
- ✓ Residential Proof
Passport, Voter ID Card, Ration card or Telephone Bill
- ✓ Birth Date Certificate
School leaving certificate or Certificate from surgeon, if you don't have birth date proof
- ✓ 3 Passport size Photograph
- ✓ Photo copies of all documents



	Best Time	Duration
1 Collect learning license Form No. 2 and 4 Fillup your form Submit your filled form at window No. 3 Get your original documents Verified	🕒 🕒	20 to 35 min
2 Payment for your written test	🕒 🕒	20 to 35 min
3 Written test 30/- Rupees	🕒 🕒	30 to 45 min
4 Your form will get back to you after written test	🕒 🕒	15 min
5 Take a signature from Dy. Transport Commissioner for learning license order	🕒 🕒	30 to 45 min
6 Pay for your learning license 250/- Rs. for smart Card 30/- Rs. for Manual learning license	🕒 🕒	For Smart Card Learning License - 3 to 4 Hours For Manual Learning License - 3 to 4 Days

Placement of the this "Information graphic board" near entrance of the RTO (Thane license department)



User testing - Problem identified

User are confused between the process number 3, 4 and 5 because numeric number also placed on the three dimension location map and they are tend to connect this number together

User confused because of the number placed in the popup (location name ex: 1, 2 written test)

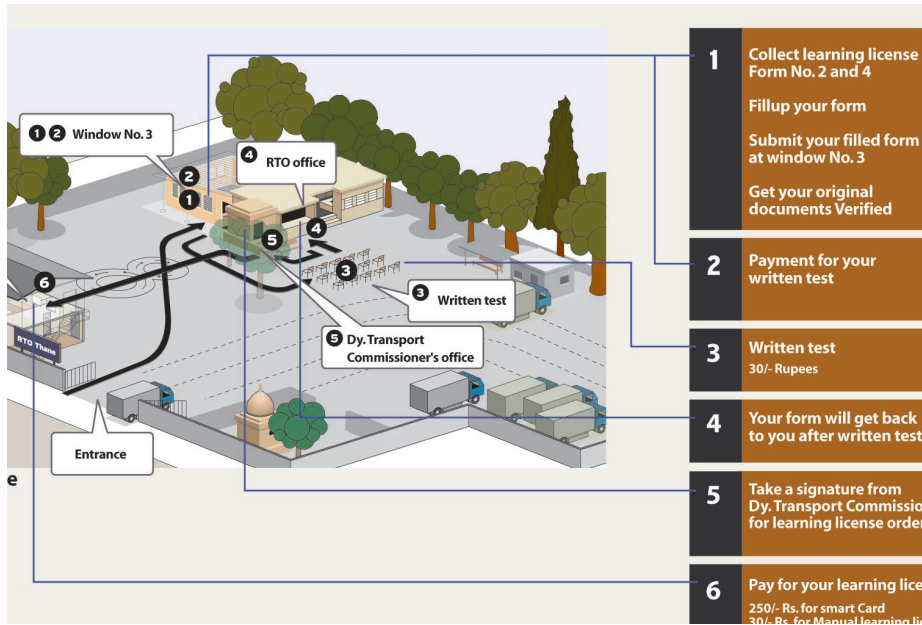
Direction line not helps much to relate the location and process

User connecting "Window No" and "Step number" together and its lead to confusion

User are relating "Duration time" and the "Best time" as together

Only the first two particular are very important for the user and they are not much concern about the Best time and Duration

Clock is not visible to understand the particular time



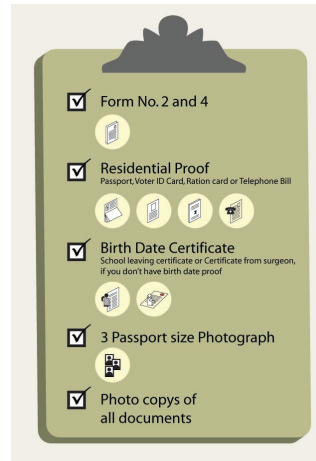
User testing - Positive aspect

User can remember the location and the sequence of the location

Most of the user are connecting the location and process chart through the numbers

User easily find the place because of the name written in the popup

User easily understand the location, they can easily understand the 3D graphic and also they can map with real location



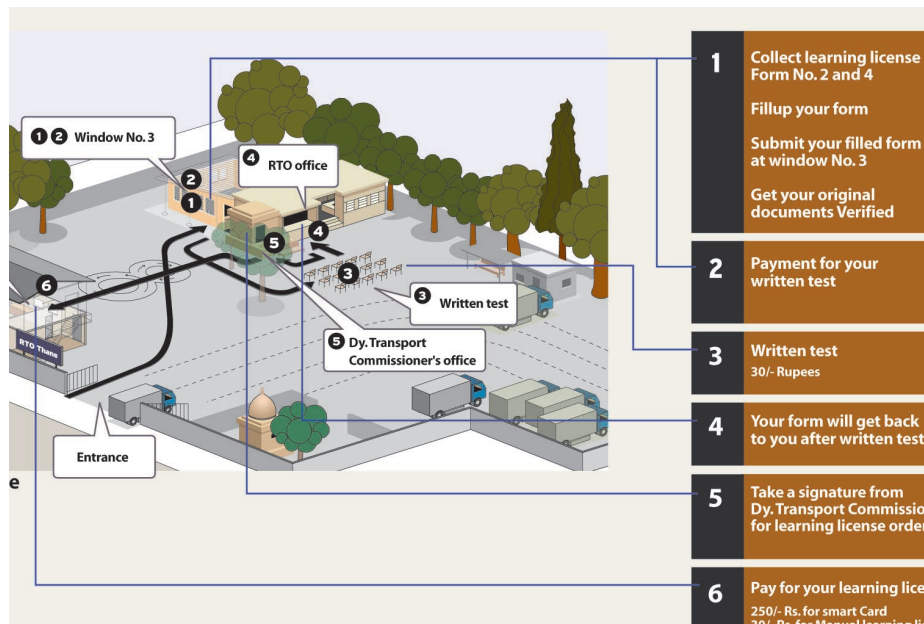
User testing - Users feedback

User treat Checklist graphic as important thing

Headline need to be added in Checklist graphic

Need of the display system at the particular place like (Window number 3)

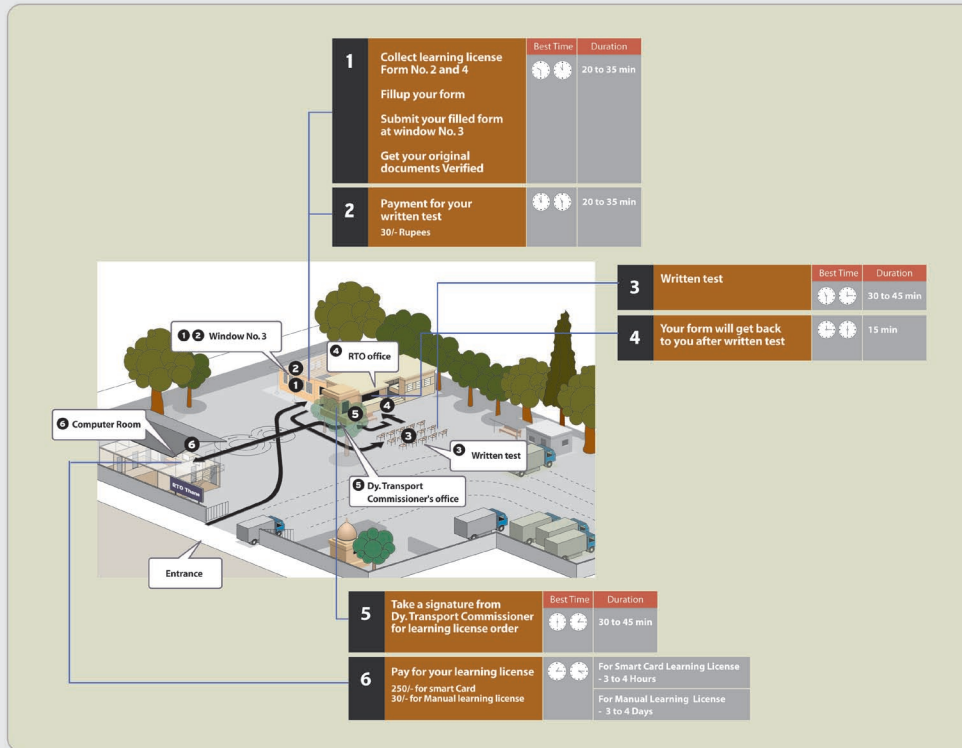
Suggestion like user needs some kind of arrow for direction line to understand location



Information for Getting Learning License




- ✓ Form No. 2 and 4
- ✓ Residential Proof
Passport, Voter ID Card, Ration card or Telephone Bill
- ✓ Birth Date Certificate
School leaving certificate or Certificate from surgeon, if you don't have birth date proof
- ✓ 3 Passport size Photograph
- ✓ Photo copies of all documents

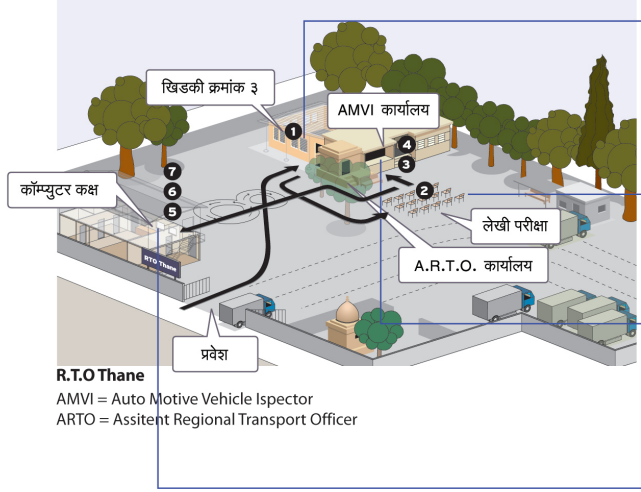
For getting Learning License You need to have listed Document and Particulars before coming to the RTO Office







Another layout option for information graphic

लर्निंग लायसेन्स मिळवण्यासाठीची आवश्यक ती माहिती

- आर. टी. ओ. मध्ये येण्यापूर्वी आवश्यक ती लागणारी कागदपत्रे**
- रहिवासी दाखला**
 पासपत्र / मतदान पत्र / रेशन कार्ड / टेलिफोन बिल,

 - जन्म दाखला**
 शाळा सोडल्याचा दाखला किंवा डॉक्टर प्रमाणित वयाचा दाखला

 - २ पासपोर्ट आकाराचे फोटो**

 - सर्व कागदपत्रांची फोटो कॉपीज**



R.T.O Thane
 AMVI = Auto Motive Vehicle Inspector
 ARTO = Assitent Regional Transport Officer

चागली वेळ	प्रक्रिया	लागणारा वेळ
	1 अर्ज क्रमांक २ खिडकी क्रमांक ३ येथुन घेणे पुर्ण भरलेला अर्ज खिडकी क्रमांक ३ वर सुपुर्त करा मुळ कागदपत्रे तपासुन / पडताळुन घ्या	२० ते ३५ मिनट
	2 लेखी परीक्षा	२० ते ३० मिनटे
	3 लेखी परीक्षे नंतर अर्ज प्राप्ती	१५ मिनटे
	4 AMVI अधिकारी यांस कडुन अर्जा वरती अनुमती स्वाक्षरी घेणे	३० ते ४५ मिनटे
	5 लेखी परीक्षा मुल्य भरणे ३०/- रुपये	२० ते ३० मिनटे
	6 बायोमॅट्रीक (कॉम्प्युटर द्वारा अंगठयाचा शिकका / थ्म इम्प्रेसन आणि डिजीटल फोटो काढले जाईल)	३० ते ४५ मिनटे
	7 लायसन्स प्राप्ती (लॅमिनेटेड लायसन्स ६ मिहिन्त्याच्या विधिमन्चता सह)	२ ते ३ तास

“Marathi language version “ of the Information graphic

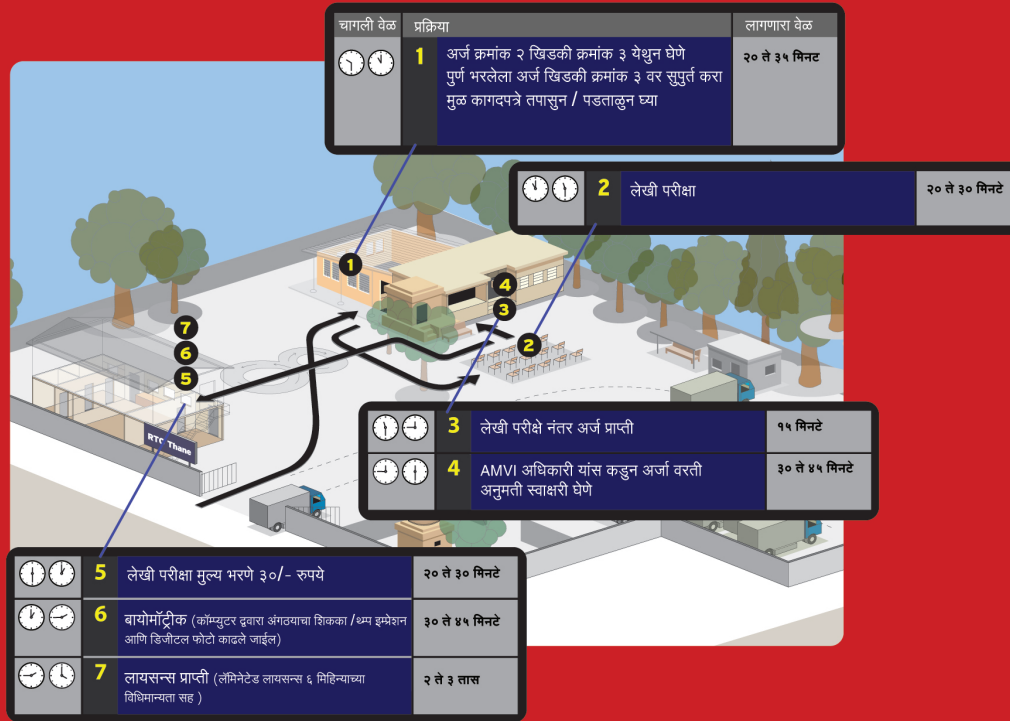
लर्निंग लायसेन्स मिळवण्यासाठीची आवश्यक माहिती

आर. टी. ओ. मध्ये येण्यापूर्वी
आवश्यक ती लागणारी कागदपत्रे

- ✓ रहिवासी दाखला
पारपत्र / मसदान पत्र / रेशन कार्ड / टेलिफोन बिल,
- ✓ जन्म दाखला
शाळा सोबल्याचा दाखला किंवा डॉक्टर प्रमाणित
वयाचा दाखला
- ✓ २ पासपोर्ट आकाराचे फोटो
- ✓ सर्व कागदपत्रांची फोटो कॉपीज

R.T.O Thane

AMVI = Assistent Moter Vehicle Inspector
ARTO = Assistent Regional Transport Officer



Final “Information graphic
board”





Implemented changes after user
testing and user feedback

Final "Information graphic board" (Learning license process)



लर्निंग लायसन्स मिळवण्यासाठी आवश्यक माहिती

लर्निंग लायसन्स मिळवण्यासाठी आवश्यक लागणारी कागदपत्रे


- रहिवासी दाखला**
 पासपोर्ट / मतदान पत्र / रेशन कार्ड / टेलिफोन बिल

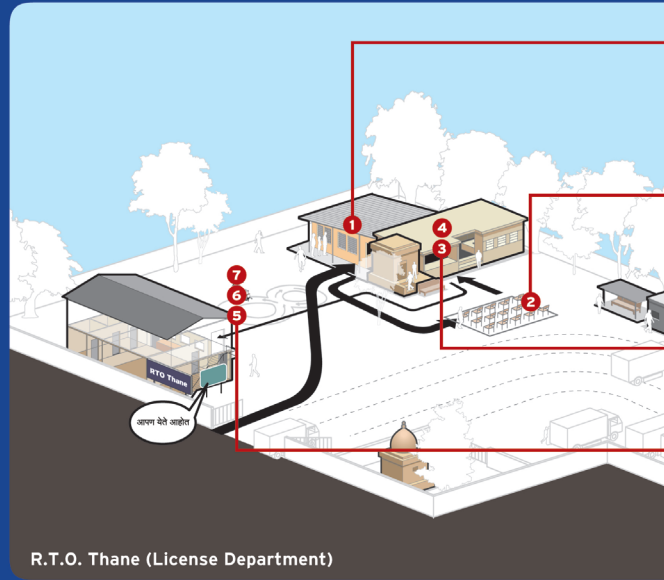
- जन्म दाखला**
 शाळा सोडल्याचा दाखला किंवा डॉक्टर प्रमाणित वयाचा दाखला (वय १८ वर्ष पूर्ण)

- २ पासपोर्ट आकाराचे फोटो**



- सर्व कागदपत्रांच्या फोटो कॉपीज**



R.T.O. Thane (License Department)

उत्तम वेळ	प्रक्रिया	लागणारा वेळ
🕒🕒	1 अर्ज क्रमांक २ खिडकी क्रमांक ३ येथुन घेणे. पुर्ण भरलेला अर्ज खिडकी क्रमांक ३ वर सुपूर्त करणे. मुळ कागदपत्रे तपासून / पडताळून घेणे.	२० ते ३५ मिनिटे
🕒🕒	2 लेखी परीक्षा.	२० ते ३० मिनिटे
🕒🕒	3 लेखी परीक्षेनंतर अर्ज प्राप्ती	१५ मिनिटे
🕒🕒	4 MVI अधिकारी यांसकडून अर्जावरती अनुमती स्वाक्षरी घेणे.	३० ते ४५ मिनिटे
🕒🕒	5 लायसन्स शुल्क ३०/- रुपये भरणे.	२० ते ३० मिनिटे
🕒🕒	6 बायोमेट्रिक (कॉम्प्युटर द्वारा अंगठ्याचा शिकका /थम्ब इम्प्रेशन आणि डिजिटल फोटो काढले जातील)	३० ते ४५ मिनिटे
🕒🕒	7 लायसन्स प्राप्ती (लॅमिनेटेड लायसन्स ६ महिन्यांच्या विधिमन्यते सह)	२ ते ३ तास





MVI = Motor Vehicle Inspector
ARTO = Assistant Regional Transport Officer



Final "Information graphic board" (Learning license process)


लर्निंग लायसन्स मिळवण्यासाठीची आवश्यक माहिती

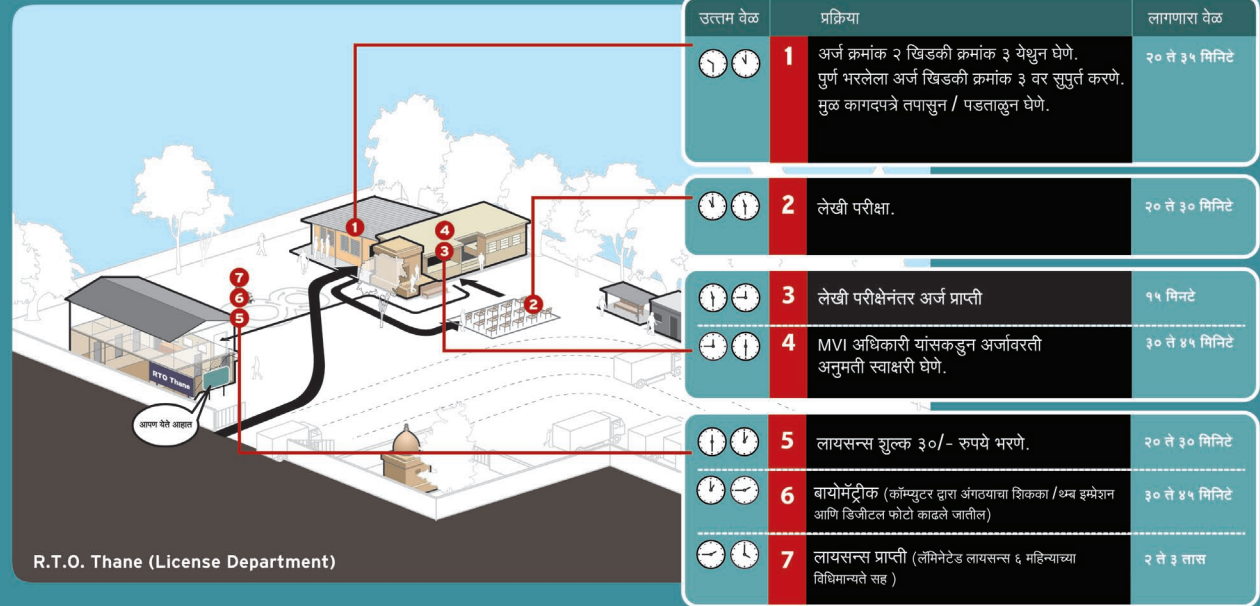
लर्निंग लायसन्स मिळवण्यासाठी आवश्यक लागणारी कागदपत्रे

- रहिवासी दाखला**
 पासपोर्ट / मतदान पत्र / रेशन कार्ड / टेलिफोन बिल





- जन्म दाखला**
 शाळा सोडल्याचा दाखला किंवा डॉक्टर प्रमाणित
 वयाचा दाखला (वय १८ वर्ष पूर्ण)



- २ पासपोर्ट आकाराचे फोटो**


- सर्व कागदपत्रांच्या फोटो कॉपीज**







MVI = Motor Vehicle Inspector
ARTO = Assistant Regional Transport Officer

Final "Information graphic board" (Learning license process)



लर्निंग लायसन्स मिळवण्यासाठी आवश्यक माहिती

लर्निंग लायसन्स मिळवण्यासाठी आवश्यक लागणारी कागदपत्रे


- रहिवासी दाखला**
 पासपोर्ट / मतदान पत्र / रेशन कार्ड / टेलिफोन बिल

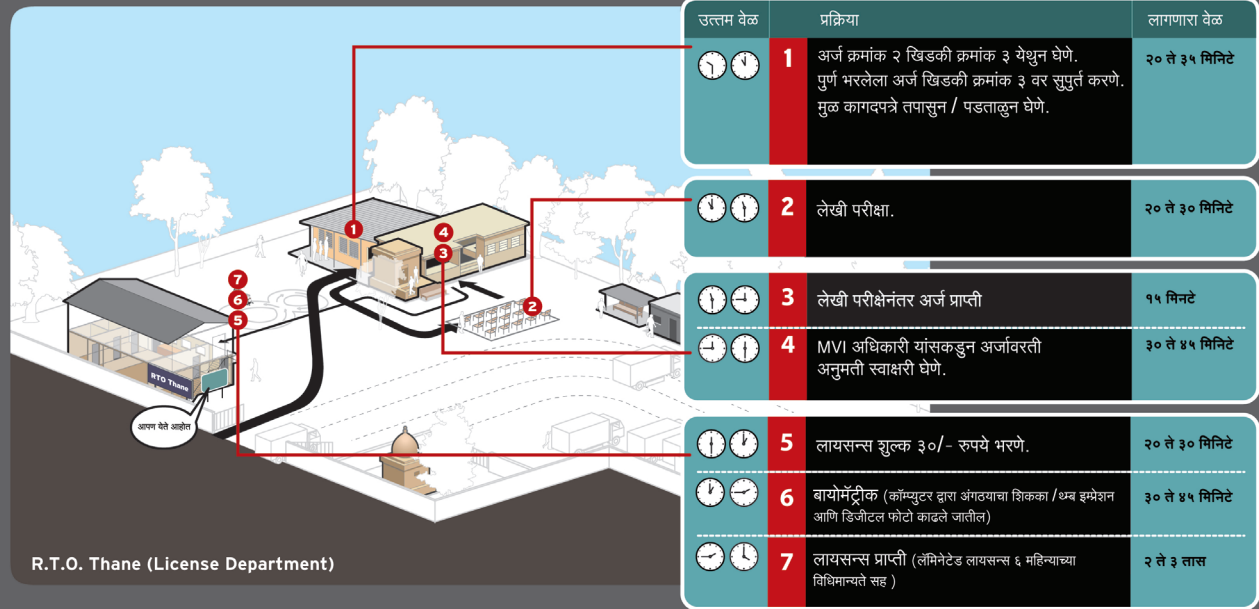
- जन्म दाखला**
 शाळा सोडल्याचा दाखला किंवा डॉक्टर प्रमाणित वयाचा दाखला (वय १८ वर्ष पुर्ण)

- २ पासपोर्ट आकाराचे फोटो**



- सर्व कागदपत्रांच्या फोटो कॉपीज**



MVI = Motor Vehicle Inspector
ARTO = Assistant Regional Transport Officer

Final "Information graphic board" (Permanent license process)

परमनन्त लायसन्स मिळवण्यासाठीची आवश्यक माहिती

परमनन्त लायसन्स मिळवण्यासाठी आवश्यक लागणारी कागदपत्रे

- ✓ रहिवासी दाखला
पासपोर्ट / मतदान पत्र / रेशन कार्ड / टेलिफोन बिल



- ✓ जन्म दाखला
शाळा सोडल्याचा दाखला किंवा डॉक्टर प्रमाणित
वयाचा दाखला (वय १८ वर्ष पूर्ण)

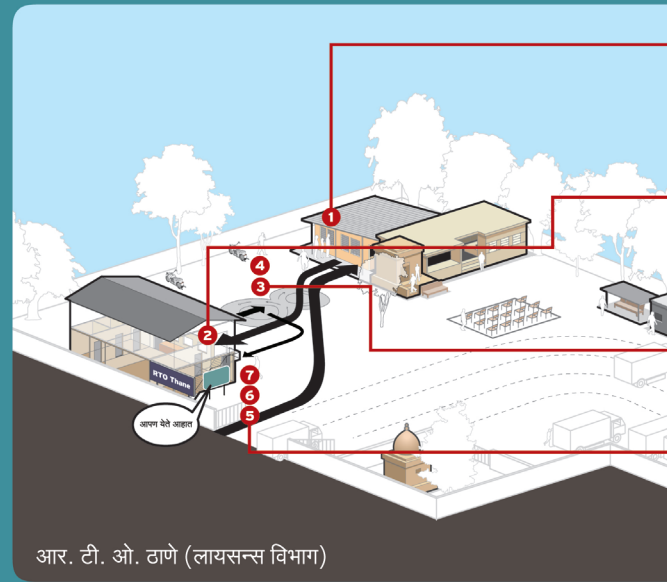


- ✓ २ पासपोर्ट आकाराचे फोटो



- ✓ सर्व कागदपत्रांच्या फोटो कॉपीज

- ✓ फार्म न. २ अधिकारीच्या
स्वाक्षरी सह



आर. टी. ओ. ठाणे (लायसन्स विभाग)

उत्तम वेळ	प्रक्रिया	लागणारा वेळ
1	अर्ज क्रमांक ४ खिडकी क्रमांक ३ येथुन घेणे. पुर्ण भरलेला अर्ज क्रमांक २ आणि अर्ज क्रमांक ४ खिडकी क्रमांक ३ वर सुपुर्त करणे. मुळ कागदपत्रे तपासुन / पडताळुन घेणे.	२० ते ३५ मिनिटे
2	चालक परिक्षा शुल्क ५०/- रुपये भरणे.	२० ते ३० मिनिटे
3	शारीरिक तपासणी	१५ मिनिटे
4	MVI अधिकारी याच्या उपस्थितीत ड्राइविंग टेस्ट देणे. (वाहनाची व्यवस्था स्वतः करणे)	३० ते ४५ मिनिटे
5	परमनन्त लायसन्स शुल्क २५०/- रुपये भरणे.	२० ते ३० मिनिटे
6	बायोमेट्रीक (कॉम्प्युटर द्वारा अंगठ्याचा शिकका /थम्ब इम्प्रेशन आणि डिजिटल फोटो काढले जातील)	३० ते ४५ मिनिटे
7	लायसन्स प्राप्ती (स्मार्ट कार्ड)	२ ते ३ तास

MVI = Motor Vehicle Inspector
ARTO = Assistant Regional Transport Officer

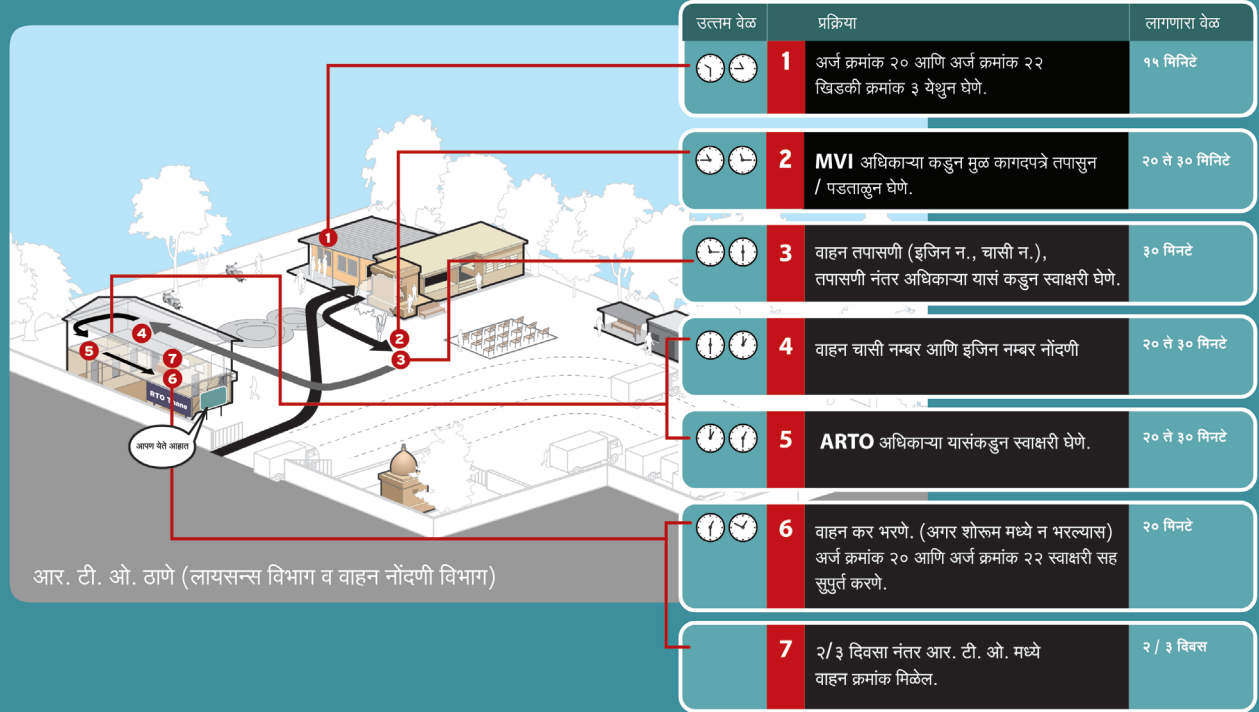
Final "Information graphic board" (Vehicle registration process)

वाहन नोंदणी साठी आवश्यक माहिती

वाहन नोंदणी करण्यासाठी आवश्यक लागणारी कागदपत्रे

- ✓ रहिवासी दाखला
पासपोर्ट / मतदान पत्र / रेशन कार्ड / टेलिफोन बिल
- ✓ सेल लेटर (शोरूम कडून घेणे)
- ✓ फॉर्म न. २० (वाहन नोंदणी)
- ✓ फॉर्म न. २२ (वाहन माहिती -
इंजिन न., चासी न.)
- ✓ वाहन इनशुरन्स कागदपत्रे
- ✓ सर्व कागदपत्रांच्या फोटो कॉपीज

MVI = Motor Vehicle Inspector
ARTO = Assistant Regional Transport Officer



Acknowledgement

The inspiration and initiation for this project has been my project guides **Prof. Anirudha Joshi** and **Prof. U.A. Athvankar** and I am Thankful to them for their invaluable guidance and inspiration throughout the project. Also I am thankful to **Prof. Ravi Poovaiah** and **Prof. G.V. Sreekumar** for their invaluable support.

I am thankful to **Transport Commissioner**, Government of Maharashtra. also thankful to Mr. P.V Mahajan (Dy. Transport Commissioner) and Mr. Khade (Dy. A.R.T.O. Kokan region), and Mr. Shivaji Patil (A.R.T.O. Thane) for their support.

Also Thank to user which I interviewed.

Thanks to all IDC faculties, staff and my classmates for their support.

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<http://www.understandingusa.com/chaptercc=3&cs=54.html>
- Ref. No. 3 <http://www.infovis.net/printMag.php?num=86&lang=1>
- Ref. No. 4 <http://www.gunaah.com/drafts/dayafterblast.jpg>
- Ref. No. 5 <http://www.irfca.org/faq/faq-map-mumbai-schematic.html>
- Ref. No. 6 <http://www.informationdesign.org/archives/003372.php>
- Ref. No. 7 <http://karnatakamess.rediffblogs.com/>
- Ref. No. 8 <http://in.answers.yahoo.com/question/index?qid=20070403021622AAjyJPO>
- Ref. No. 9 http://www.sabhlokcity.com/lists/india_policy/2000/Oct/msg00019.html